

**Teachers' perceptions regarding the implementation of the Level 1
Geography Achievement Standards within the New Zealand Senior
Secondary School Context.**

John Murray Lang Fastier

**Thesis submitted in partial fulfillment for the degree of
Master of Teaching and Learning**

Christchurch College of Education

September 2006

Contents

Title	Page
1. Acknowledgements	4
2. Abstract	5
3. Chapter 1 Introduction	6
i Background	6
ii Why the study is of interest to me	8
iii Relevance	9
iv Assessment Changes	10
v Relevant Research and Theory	13
4. Chapter 2 Methodology	17
i Theoretical Rationale	17
ii Research Methods	20
iii Participants	20
iv Research Questions	22
v Interviews	23
vi Data Analysis	24
vii Methods of Verification	25
viii Reporting Outcomes	25
ix Ethics	26
5. Chapter 3 Presentation of Results	28
i Introduction	28
ii Setting the Scene	28
iii Emerging Themes	29
iv Perceived Challenges	30
v Factors Supporting Implementation	35
vi Obstacles Hindering Implementation	41
vii Transparency of Level 1 Geography Achievement Standards	49
viii Impressions of Level 1 2002 Examination Papers	52
ix Changes to Year 11 Learning and Assessment Programmes	55
x Confidence Levels	64
xi Summary of Findings	68
6. Chapter 4 Discussion of Findings	73
i Stage One	73
ii Stage Two	88
7. Chapter 5 Concluding Comments and Recommendations	93
i Limitations of the Study	95
ii Future Research Possibilities	96
iii Recommendations	96
8. Supervision	98

9. References	99
10. Appendices	102
i Letters sent to participants, including consent forms	102
ii Application form for Ethical Approval	107
iii Letter Granting Ethical Approval	113
iv Application for Appointment of Supervisors	114
v Letter of Academic Approval	115
vi Typical Year 11 Assessment Programmes 2001 and 2003	116
vii Implementation Questionnaire	118
viii Definition of Assessment Terms	119
ix Maori Concepts	122
x Perspectives	124
xi Frequently Used abbreviations	127
11. List of tables	
i Comparison of Geography Assessment Methods at Year 11	11
12. List of Figures	
i 2002 NCEA Implementation	71
ii 2003 NCEA Implementation	72
13. Extended Abstract	128

Acknowledgements

I would like to express my appreciation for the contribution of three distinct groups of people who have played a significant role in the production of this thesis.

These are:

- The six case study geography teachers, firstly for their permission to undertake this research, and secondly for so willingly participating in the semi-structured interviews conducted during 2002 and 2003.
- My thesis supervisors Dr Lindsey Conner and Roger Baldwin for their ongoing advice and guidance. Their combined wisdom and encouragement was greatly appreciated, as was their friendly and supportive manner.
- To my partner Pam and two sons Adrian and Sam for their good humour, patience and understanding.

My sincere thanks and gratitude to everyone.

Teachers' perceptions regarding the implementation of the Level 1 Geography Achievement Standards within the New Zealand Senior Secondary School Context.

Researcher: Murray Fastier

Supervisors: Dr Lindsey Conner and Roger Baldwin

Abstract

The National Certificate of Educational Achievement (NCEA) is the recently introduced qualification for New Zealand senior secondary school students. Based on a mix of internal and external assessment against achievement standards, it represents a complete break away from previous norm-reference based qualifications. NCEA was first introduced in 2002 starting at Level 1, involving Year 11 students in their first year in senior secondary school education.

The implementation of Level 1 NCEA related assessment changes involved a considerable mind shift in assessment practice for teachers, especially for those with no previous standards-based assessment experience. The use of achievement standards impacted not only on how teachers gathered evidence and made judgements in relation to student work, but also on the ways in which they conducted recording and reporting, and managed procedures such as reassessment and moderation.

Change of this nature by necessity, at least short term, was always bound to give rise to implementation concerns and challenges. The focus of this research is on investigating geography teachers' perceptions regarding the implementation of the Level 1 NCEA related geography achievement standards. It aims to identify the factors perceived as supporting or hindering the implementation process, the likely implications of achievement standards-based assessment for teaching and learning, and the types of strategies being developed to ensure the future manageability of NCEA related assessment change.

Chapter One: Introduction

Background

The state of assessment and qualification arrangements within the New Zealand senior secondary school context was the centre of considerable debate throughout the 1980s and 1990s (Fastier, 2001). The suitability of the traditional norm-reference based approaches had been strongly challenged. The Post Primary Teachers' Association (1997) and the Ministry of Education / New Zealand Qualifications Authority (1998), for example, considered the norm-referenced examinations, based around 'School Certificate' and 'Bursary', to be outmoded in terms of meeting society's needs. The unit standards (a form of standards based assessment) implemented in the mid 1990s by the New Zealand Qualifications Authority (NZQA), to assess conventional senior school subjects were also strongly criticised. Strong opposition to the use of unit standards came from sectors of the teaching profession (e.g. Post Primary Teachers Association, 1997), from the business community (e.g. Smithers, 1997) and from academics (e.g. Irwin, Elley & Hall, 1995; and Elley, 1996). In an attempt to end these ongoing debates surrounding senior secondary school assessment and the associated problem of having a dual accreditation system, the then Minister of Education, the Hon. Wyatt Creech announced 'Achievement 2001' in November 1998. According to Creech (1998) this initiative, involving a compromise between unit standards and the status quo, provided a well constructed middle path, blending the best of the old and the new assessment systems.

The Achievement 2001 initiative, later known as Achievement 2002, involves every senior secondary student studying towards one single coherent qualification the 'National Certificate of Educational Achievement' (NCEA). This new system is credit based, allowing senior students to accumulate credits in order to gain the NCEA at levels one to three of the National Qualifications Framework (NQF). For all conventional school curriculum subjects, a mix of internal and external assessment against 'Achievement Standards' is used to generate credit. These achievement standards (developed by expert subject panels) help set in place the required standard for students to gain credit, and in addition allow for the recognition of merit and excellence grades to be awarded above the achievement level.

The achievement standards take into account bitter lessons learnt from past experience while aiming to retain the positive outcomes. For instance the number of achievement standards is restricted to between five and eight only per subject per level for consistency purposes. The standards are expressed as broad outcomes avoiding over specificity. Provision has been made

not only for the award of achievement, but also for the recognition of merit and excellence within all achievement standards. An identical credit value (24 credits) has been set as a total number of credits available for each subject at each level to ensure overall comparability. Some achievement standards are assessed internally and some externally allowing for assessment methods to match the type of achievement criteria being measured. A requirement that most subjects must have at least half of the credits assessed externally helps to keep teacher workloads manageable. The reporting of information in a meaningful and useable way, involving describing what students are able to do and achieve, also maintains fidelity with the New Zealand curriculum.

‘Achievement 2002’ is not however without its share of detractors. While at face value achievement standard assessment can be construed as a well-chosen middle pathway, incorporating the best of the old and the new; undoubtedly there are still issues to confront and implementation concerns to resolve. In terms of issues, McCann (1999) the PPTA president, questioned whether NCEA did represent a workable compromise or not, and speculated that we could in fact end up with the worst of the norm-referenced exam and unit standards systems. For Irwin (1999), a policy analyst for the New Zealand Business Roundtable, a key issue was the lack of research, local or international, on which to base the achievement standard approach. He is aware of no official paper that analyses the problems and explains why certain options were chosen over others and how the inevitable trade offs were made. He questions the motivation behind the compromise. He argued that if Achievement 2002 is built on a political compromise, with short term attractions and not on a sound educational foundation, it may ultimately fail in the longer term.

Priestly and Higham (1999), along with Irwin (1999), are of the opinion that New Zealand’s Achievement 2002 policy is heading in a direction where other countries have feared to tread. They believe that Achievement 2002 and the associated achievement standards represent a radical reform structurally and theoretically unsound, driven by ideological and political rather than educational considerations. In contrast the Ministry of Education (2000b) argue that the changes are evolutionary not revolutionary in nature and carefully take into account assessment and qualification lessons learnt from past experiences in the New Zealand education sector. While these varying viewpoints in many ways are perceptual in nature, one could say at this stage the jury is still out.

A postal ballot conducted in 2000 by the Post Primary Teachers’ Association (PPTA) saw sixty

five percent of teachers vote in support of implementing the NCEA in principle. However, in answer to a second question, whether they believed adequate policies, procedures, and resources were in place for its implementation, eighty two percent of teachers expressed a negative viewpoint. The teachers already overburdened with heavy workloads (McCarthy, 2000) expressed the need for better policies and procedures and for more time and support in order to do the job if the qualification was to be successfully implemented. McCann (1999) and the PPTA (1997) from the outset have both urged a cautious approach, suggesting the need for thorough research and trialing before decisions and changes are implemented.

The Ministry of Education (MoE) and NZQA have in response to such feedback taken action to address the concerns being expressed. To ensure high quality professional development and the availability of sufficient time for teachers to implement the achievement standards, initial implementation time lines were extended by a year (from 2001 to 2002). All teachers received four days training (two days in 2000 and a further two in 2001). Further training was planned for 2002 and 2003. The Ministry of Education agreed to supply quality assured exemplar ‘off the shelf’ activities and schedules, for classroom teachers to use directly or to modify in order to ensure a consistency of standards and to keep teacher workloads manageable. NZQA formed subject National Assessment Panels (NAPs) to produce sample achievement based exams for level 1. These and additional exemplar materials were being made available on the Ministry of Education’s Te Kete Ipurangi (TKI) and NZQA’s web sites.

Why the study is of interest to me

As a geography educator since 1974, I consider myself fortunate to have experienced full involvement in development and use of constantly evolving assessment practices and methods over the last three decades. This has included working as an assistant examiner, moderator, panel leader and marker in the norm-referenced external examination system. It has also involved playing a key role at a national level in the development and implementation of Achievement Based Assessment in the late 1980s, Unit Standards in the mid 1990s and Achievement Standards from 2000 onwards. This, combined with my role as joint holder of the Assessment Portfolio for the New Zealand Board of Geography Teachers and ongoing contact with teachers, has provided me with a good insight into current issues and controversy regarding assessment practice. In the role of teacher educator I am keen to ensure that the accumulated knowledge and experiences gained in relation to assessment reform is made available for the use of both teachers and teacher trainees.

In April 2001 I had an article published in the New Zealand Journal of Geography “The Evolution of Achievement Based Assessment in the New Zealand Senior School Secondary School Context,” in which I used Year 11 Geography as a case study. I was keen to develop this interest further by conducting research into how geography teachers made sense of implementing the NCEA related assessment changes at Year 11 and identifying which factors the geography teachers perceived as helping and or hindering implementation process.

Potential areas I was keen to investigate in relation to the above included:

- the transparency of the assessment criteria for students and teachers
- managing the shift towards an evidence-gathering approach
- external initiatives provided to support NCEA implementation
- impact on teacher workload
- confidence in teacher judgement making
- issues of sufficiency and reassessment
- influence on syllabus delivery
- assessment design and moderation procedures
- recording and reporting changes

Relevance

Implementing NCEA related assessment change represents a challenge to all classroom teachers. It involves a considerable mind shift in assessment practice, particularly for those geography teachers who have had no prior involvement in any form of standards based assessment. The use of achievement standards impacts not only on how evidence is gathered and judgements made in relation to student work but also on how recording and reporting is conducted, and how reassessment opportunities and moderation are managed. Change of this nature, at least in the short term, is bound to increase teacher workloads. Practical and realistic ways to help ensure the manageability of NCEA implementation, the validity of assessment practice and efficient use of teacher time need to be investigated.

Two further implementation issues also face geography teachers. The first relates to the opportunity taken by the geography expert panel writers, to follow a recommendation of the position paper prepared by the New Zealand Board of Geography Teachers (1999), to update the Geography Syllabus for Schools Forms 5-7, Ministry of Education (1990) via the NCEA achievement standards. Recent developments in geographic thinking and approaches, the use of

Maori concepts and updated geographic terminology as a result have all been incorporated into the achievement standards. Extra support material may well be needed for geography teachers, if they are to successfully incorporate these changes into their current teaching and assessment programmes. The second issue relates to geography teaching practice in schools at Year 11 having become largely driven by the external School Certificate examination. The weighting of credit allocation for the proposed geography achievement standards reflects more closely the stated syllabus requirements (as opposed to School Certificate weightings) and therefore will need careful consideration and some adjustments to be made by geography teachers in the delivery of their current Year 11 programmes.

Assessment Changes.

Table 1 compares the nature of the proposed Geography Achievement Standards for Level 1 (Year 11) as at 2001, with the previously used Geography School Certificate and equivalent Unit Standards requirements.

Level 1 Geography has seven achievement standards against which students are assessed. Four of the subject's achievement standards are externally assessed in an examination and the classroom teacher internally assesses the other three. The external standards are worth a total of thirteen credits and the internal standards worth a total of eleven credits.

The external assessment of the Year 11 geography achievement standards closely resembles the two-hour norm-referenced School Certificate Geography exam. The time duration differs (three hours not two), but the content being assessed is similar, involving questions based on a variety of geographic resources as well as questions based on the three syllabus prescribed common topics (Natural Hazards, Population Studies, and Resources and Their Use). The assessment of global studies, often worth up to five of the sixty six marks awarded in the School Certificate exam, has however been made into a separate internally assessed achievement standard and been given greater emphasis. As with the previous School Certificate Geography exam, inferencing will be used, (inferring course knowledge by assessment through the use of sampling) as time is insufficient for the students to show evidence of achievement against all outcomes. The assessor selects which of the achievement standard related outcomes are to be examined in any one year. Inferencing of outcomes will not apply to the internally assessed achievement standards, as the constraints of exam time restrictions are not such an issue.

Table 1 Comparison of the Current and Proposed (2001) Geography Assessment Methods for use at Year 11 (Form 5)

Norm Referenced External Examination Generating a percentage mark and final grade A to E (A being the highest) for the Year 11 School Certificate Examination (S.C.).	Achievement Standard Based Generating credit towards a Level 1 NCEA. Credit and Standards gained recorded on the NQF as part of the 'record of learning' plus the achieved, merit or excellence grades gained.	Unit Standard Based Generating credit towards a National Certificate. Credit and Standards gained recorded on the NQF as part of the 'record of learning'. Competency based. Standard is met or not met.
A two hour external exam worth 66 marks plus an internally assessed section worth 34 marks. 100 marks in total.	Seven achievement standards: Four externally assessed in a three hour exam (worth 13 credits) and three internally assessed (worth 11 credits). 24 credits in total.	Six unit standards: All internally assessed. 24 credits in total.
S.C. Section A. Resource-Based Questions assessing geographic ideas and skills. <i>External</i> 25 marks	Apply skills and ideas in a geographic context. (Assessed using a wide range of resources) <i>External</i> 4 credits	
Topic Questions on: Natural Hazards Populations Studies Resources and Their Use.	Examine extreme natural events. (assesses at least 2 of 5 possible outcomes) <i>External</i> 3 credits	Describe processes and interactions in a natural hazard. (4 elements and 6 performance criteria) <i>Internal</i> 4 credits
S.C. Sections B Topic Questions (Skills and Short Answers) <i>External</i> 15 marks	Examine population patterns, processes and issues. (assesses at least 2 of 5 possible outcomes) <i>External</i> 3 credits	Describe and explain the characteristics, patterns and processes of a population. (Assesses 6 elements and 10 performance criteria) <i>Internal</i> 4 credits
S.C. Sections C Topic Questions (Paragraphs) <i>External</i> 21 marks	Examine resources use. (assesses at least 2 of 4 possible outcomes) <i>External</i> 3 credits	Describe and explain resource use. (Assesses 4 elements and 6 performance criteria) <i>Internal</i> 4 credits
S.C. Section D School Selected Studies including Global studies. <i>External</i> 5 marks	Examine a global study. (assesses 4 outcomes to gain credit) <i>Internal</i> 3 credits	Describe a global pattern and the process (es) within it. (3 elements and 4 performance criteria) <i>Internal</i> 3 credits
Current geographic issues <i>Internal</i> at least 10 out of the 33 marks	Examine a contemporary geographic issue. (assesses 3 outcomes to gain credit) <i>Internal</i> 3 credits	Examine a current geographic issue. (Assesses 3 elements and 6 performance criteria) <i>Internal</i> 3 credits
Practical work including fieldwork and an individual investigation or group project(s). <i>Internal</i> at least 5 out of the 33 marks	Carry out directed geographic research. (assesses 3 outcomes to gain credit) <i>Internal</i> 5 credits	Carry out a geographic inquiry with direction. (Assesses 5 elements and 11 performance criteria) <i>Internal</i> 6 credits

The Year 11 geography exam structure differs with the NCEA in that it is made up of four discrete achievement standards. The 'Applying Skills and Ideas in a Geographic Context' achievement standard worth four credits is given a slightly longer time allocation than the three prescribed common topic related achievement standards, each with a credit value of only three. All four achievement standards stand alone with no aggregation of credit. Another difference is that instead of getting an overall percentage mark, students will either gain a grade of 'non achieved', 'achieved', 'achieved with merit' or 'achieved with excellence' for each of the four achievement standards they attempt in the examination. Students gaining an achieved grade or better, gain the associated credit points to contribute towards their NCEA (a combined total of 80 credits is required to gain NCEA at each year level). Assessment is solely against the achievement standards and no form of scaling is employed.

Two major differences exist between the internally assessed geography achievement standards and the internally assessed component of School Certificate Geography. The overall internal weighting has increased from one third (34%) to closer to half (45.8%) and the global studies component, as was the case with unit standards, has undergone a shift from external to internal assessment status. Otherwise the internal assessment content remains the same assessing geographic issues and research incorporating fieldwork. As with the externally assessed achievement standards the three being internally assessed will stand alone, and will not be adjusted or scaled in light of students' examination performances.

Several similarities exist between the Year 11 syllabus based geography unit standards and the achievement standards that replaced them in 2002. Both forms of assessment generate a total of twenty four credits, although there are seven achievement standards compared with only six unit standards. Apart from the additional achievement standard 'Apply skills and ideas in a geographic context', the content coverage of the other six is remarkably similar for both (refer to Table 1). Both are examples of standards based assessment and involve no form of scaling or ranking (the students are compared with the standards not each other). Their outcomes (summarised by the titles) once achieved are described on a student Record of Learning. The credits they generate contribute towards the new National Certificates of Educational Achievement available at each senior school level.

Fundamental differences, however, do exist between unit standards and achievement standards in geography. All unit standards are internally assessed (creating workload issues) and no

additional grades beyond competency are awarded (performance at the merit and excellence levels is not recognised). Individual elements of each unit standard are capable of being assessed separately, unlike the assessment of achievement standards that require a complete performance for all of the stated assessment criteria. The assessment criteria for the geography achievement standards are broader and fewer compared to the unit standards. For example, the three internally assessed achievement standards have only a combined total of ten assessment criteria, compared with a combined total of twenty one assessment (performance) criteria (exclusive of elements) for the equivalent three unit standards. Where reassessment is available for all unit standards throughout the year this does not apply to the externally assessed achievement standards and reassessment is not a mandatory requirement for the internally assessed achievement standards (Ministry of Education, 2000b). An additional requirement of achievement standard assessment schedules is the need to recognise not only achievement but also to differentiate between 'achievement with merit' and 'achievement with excellence' beyond the achievement grade level.

Relevant Research and Theory

As Strathdee and Hughes (2001) indicate, there has been comparatively little research in New Zealand into the impacts of competency based assessment regimes in the field of the sociology of education. Most contributions have tended to favour policy analysis over ethnographic studies in schools. Codd (1995), Roberts (1997), Dobric (1998) and Tobias (1999) have all adopted this approach, exploring the NZQA and the National Qualifications Framework (NQF) in terms of their policy implications. Such studies however tend to be removed from the everyday functioning of schools and tend to neglect the impacts of the assessment related policies on the students, teachers and administrators they affect. Strathdee and Hughes (2001) are one of the few exceptions, using a qualitative methodology to research the impact of NQF on student learning. They conducted semi-structured interviews between 1997 and 1999 to draw on the perceptions, opinions, and experiences of male secondary school students in regard to how valuable they thought qualifications obtained through the NQF would be to employers. It is hoped that the research reported in this thesis will add to the body of qualitative research, using semi-structured interviews with Year 11 geography teachers in order to gain their perspectives re the implementation of NCEA policy related assessment changes on classroom practice.

The work of Hargreaves and Earl (2002) in Canada has relevance to this thesis. They used semi-structured interviews with Grade 1 and 8 teachers in Ontario, to conduct their research on 'Perspectives on Alternative Assessment Reform'. They asked teachers about their personal

understanding of assessment, how they had acquired this understanding, how they integrated change into practice, what the practices looked like and what support systems had been provided for them. Their work has strong parallels with this research, which also uses semi-structured surveys to look at how (geography) teachers perceive assessment change within a New Zealand context.

Hargreaves and Earl (2002) summarised their findings on how the teachers in Ontario viewed alternative assessment reform, in relation to the following four overarching perspectives: technological, cultural, political and postmodern. The technological perspective focused on issues of organisation, structure, strategy and skill in implementing new assessment methods. The cultural perspective examined how the new assessment methods are interpreted and integrated into the social and cultural contexts of schools. The political perspective viewed assessment reform as being embedded in and resulting from the dynamics of power and control, for example political purposes. Finally, the post-modern perspective was based on the view that in today's uncertain world, human beings are not completely knowable and those new assessment methods and experiences could be fundamentally questionable.

Only the first two of these perspectives have direct relevance to this research study. In terms of the NCEA related assessment change in Year 11 geography it will be interesting to reflect on how the geography teachers surveyed perceived:

- 1) The external organisation, structures, strategies and skills put in place by agencies such as NZQA the MoE to help facilitate the NCEA related assessment reform (technological perspective).
- 2) How they as teachers interpreted the level 1 geography achievement standards and went about integrating / implementing them into their classroom teaching and learning programmes (cultural perspective).

The political and post-modern perspectives are beyond the scope of this research and will not be directly discussed.

In terms of international perspectives, Strachan (2001) points out that the NCEA qualification is designed to address a number of common worldwide assessment issues. These include incorporating vocational and academic learning, using both external and school based assessment, assessing against standards, assessing a wide range of curriculum outcomes, using varying assessment methods and reporting in ways that meet user needs in terms of information supplied. While the NCEA and related achievement standards solution to these issues is unique,

aspects of the proposed reform can be seen in Australian and Scottish examples.

The Victorian Certificate of Education (VCE) qualification experimented with by the Labour Government in Victoria, Australia during 1990-1991 had many similarities to New Zealand's NCEA. As Donnelly (2000) points out the VCE, like the NCEA, sought to: abolish norm-referenced assessment, reduce the emphasis on external end of year examinations, abolish all forms of scaling, use moderation with school based assessment, reduce the assessment scale to five outcomes as opposed to New Zealand's four (non achieved, achievement, merit and excellence) and to blur the distinction between academic studies and vocational educational training. Donnelly noted that the VCE quickly encountered problems in relation to unmanageable teacher workload and stress, authenticity of student work, comparability of results and inflated grades. Victoria has since returned to a more traditional system of assessment with increased emphasis on external examinations and statistical moderation. In 1998 it was further recommended that assessment tasks, used outside of the classroom over an extended period of time, be replaced by formal tests supervised by teachers. The reasons being, to reduce student cheating and the onerous and time consuming demands associated with verifying and moderating student assessment work.

The NCEA also has strong similarities to the new Scottish qualification reforms. The Scottish Qualifications Authority (SQA) introduced in 2000 the "Higher Still" programme to produce a unified record of qualifications across the senior secondary education ability range (i.e. both academic and vocational streams). The Old Scottish Examination Board and Scotvec (the Scottish Vocational Education Council) were merged to avoid having two or more qualification tracks of unequal status. As McKay (2001) pointed out, depending on whom you talked to the new qualification was either going to be an exciting, innovative, progressive model for the rest of the world to follow, or a recipe for the disaster, which unfortunately did come to pass. The first year of implementation according to McKay was a "debacle" and a "fiasco". Teachers were being asked to take on a huge additional workload that the new system demanded of them. They struggled with all the monitoring, marking of high stakes internal assessment, and bureaucratic requirements. At the end of the year the SQA could not manage the system resulting in a political storm. Results were delayed and many students received incorrect results with damaging consequences for the labour market and university entry. Many parents could not understand the complex reports. The number of appeals was unprecedented. McKay was also uncertain whether the situation would be much better for 2002.

While no assumption was made that the implementation of NCEA in New Zealand would experience similar problems to the Australian and Scottish case studies, warning signals did exist that the initial stages of implementation could be challenging and not necessarily trouble free. That the NCEA assessment initiative could take some time to bed in, and at least initially place high demands on teacher workloads.

Black (2001) in his report to the Qualifications Development Group (QDG) of the MoE concerning the development of the NCEA noted like Strachan (2001) that New Zealand was not alone in the issues that it faces in terms of assessment reform. Based on international experience, he raised issues of relevance to this proposed research, regarding the roles of teachers, teachers and learning and assessment practices. These issues include:

- how teachers carry out and inter-relate their different roles in assessment;*
- how summative work affects and links with their formative assessment practices;*
- possible effects of pressures to do well in assessments, on the learning work of teachers and students;*
- the models of practice that external assessment procedures and instruments may or may not provide;*
- effects of assessment provided from or decided by a national system on teachers' practices in summative assessment for internal school use;*
- the effectiveness of communication to teachers of the meanings of standards and criteria, given this should be by both explicit rules and exemplary materials;*
- the overall burden of teachers' assessment work, and its possible overlap and synergy with good teaching work.*

The significance of the above issues and the geography teachers' perceptions of them in relation to the implementation of the Level 1 Geography achievement standards warrant careful consideration.

Chapter 2 The Methodology

This chapter outlines the qualitative research methodology used to conduct this research including the rationale behind it. It also describes the research design methods used to gather, analyse and make sense of the data and how ethical issues were addressed.

Theoretical Rationale

A qualitative research approach using semi-structured interviews with six case study informants was the research design selected to discover how geography teachers perceived NCEA related assessment change at Year 11.

Qualitative research typically relates to an inquiry process, concerned with understanding a human or social problem, “based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting” (Cresswell, 1994, p2). Qualitative designs therefore suit educational research where the researcher wants to gain an insider's view of what is going on in a particular situation or setting such as a classroom. By using inductive methodology and maintaining a close association with both participants and activities within the setting, the researcher is able to discover subtleties and complexities of educational interaction too often missed by the more scientific, positivistic approaches (Burns, 1997).

A rich variety of qualitative research strategies and techniques are available for educational research and it is not easy to reduce these down to a simple and prescriptive set of principles. Mason (1998) identifies the following three characteristics as being common elements of qualitative research methodology. Firstly qualitative research is 'interpretivist' in that it is concerned with how the social world is interpreted, understood, experienced or produced. Secondly qualitative inquiry methods of data collection are based on being flexible and sensitive to the social context in which they are produced. Thirdly the methods used for data analysis and explanation place emphasis on producing holistic understandings of the rich, complex, detailed data gathered.

Multiple case studies, purposefully selected were used in the research inquiry. Yin (1994, p.13) defines a case study as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context”. Case studies as such are seen as being appropriate when contextual conditions are assumed to be important for the phenomenon under study as proposed in this research. Yin points out that multiple case studies, as opposed to a single case study, comprise a

comparative rationale. Yin explains that while a multiple case study design requires the same questions or propositions to be examined in each case, it also allows for their further development in each case, during the course of study, in order to trail the particularities of each case.

In terms of case study selection Patton (1990) points out that in contrast with quantitative inquiry, purposeful sampling (as opposed to random) is the dominant strategy used in qualitative research. Purposeful sampling seeks information-rich cases that can be studied in depth. Purposeful sampling can lead to detailed description of each case, in addition to identifying shared patterns or themes that cut across cases. Patton (1990) however warns against three types of sampling error that can arise in qualitative research. They are 1) distortions caused by insufficient depth in sampling, 2) distortions introduced by changes over time, and 3) distortions caused by lack of depth in data collected at each site.

The semi-structured interview employed in this research is one method of qualitative research commonly engaged in by educational researchers. The main purpose of the semi-structured interview is to gain an in-depth understanding of the interviewee's perspectives and experiences, and to do so within a framework in which the interviewee feels at ease to express their own understandings in their own terms (Maykut & Morehouse, 1994). In conducting a semi-structured interview the interviewer has a clearly defined area of interest and a set of questions prepared in advance to use as a guide, but is flexible in how the responses may be achieved. Based upon their perception of what seems most appropriate in the context of the interview, the interviewer may modify the order of the questions, change the wording, provide prompts, and omit particular questions which seem inappropriate with a particular interviewee or include additional questions (Robinson, 1997). Accounts derived from semi-structured interviews are then coded and carefully studied in search of emerging themes and concepts. Findings are then reported as narrative containing direct quotations from the interview accounts.

Burns (1997) outlines several advantages of semi-structured interviews. Firstly the informant's perspective is provided rather than the perspective of the researcher being imposed. Secondly the informant is able to use language natural to them, rather than trying to understand and fit into the concepts of the study. Thirdly the informant is in equal status to the researcher in the dialogue. These advantages above all assist in preventing the researcher's preconceptions and biases directing the line of the interview. The flexibility of semi-structured interviews also offers the qualitative researcher the advantage of being able to modify their line of inquiry, to follow up

interesting responses and to investigate underlying motives, enabling a more in-depth understanding.

Mason (1998) and Robinson (1997) both point out that a major disadvantage of semi-structured interviews is the cost in terms of skills, time and effort. The planning and conducting of the semi-structured interviews is very time consuming as is the writing up of transcripts and conducting the subsequent analyses e.g. a 1 hour tape may take 10 hours to transcribe. They stress that employing semi-structured interview methodology is not an easy option, despite deceptive appearances. Mason (1998) indicates such interview techniques are challenging intellectually, practically, socially and ethically. She also notes that considerable experience and skill is required by the interviewer in order to be guided by interviewee responses, and to successfully use prompts and probes. The flexibility of semi-structured interviews although an advantage can also result in a lack of comparability from interview to interview, making the task of data analysis more complex.

Validity issues in qualitative research refer to the extent to which the data is plausible, creditable and trustworthy and able to be defended when challenged. Summarised below are a number of strategies, outlined by Johnson (1997) and Benz and Newman (1998), used in this research to promote validity. In terms of descriptive validity they suggested the use of low inference descriptors phrased very close to the participants' accounts and researchers' field notes e.g. the use of direct quotes. Also recommended was the use of participant feedback. This involves going back and checking with the participants, in order to verify that the interpretations made were what they had meant.

For the cross checking of information and conclusions the use of peer review plus four types of triangulation methods, which could be of relevance are outlined below. Peer review involves discussing your interpretations and conclusions with other people. For example, a peer who is interested in your study topic and can provide insights about your data, and a peer who may not be directly interested in the topic but who could be critical and challenge your data. In this research peers involved were chosen from the Geography National Assessment Panel and Teacher Support Services. Triangulation methods to help with the corroboration process can include:

- 1) Data triangulation: using multiple data sources to help understand a phenomenon.
- 2) Method triangulation: using multiple research methods to study a phenomenon.

3) Investigator triangulation: using multiple investigators (or researchers) when collecting and interpreting the data.

4) Theory triangulation: using multiple theories and perspectives to help interpret and explain the data.

Data triangulation, as outlined on page 27, was used to help ensure validity in this research. A well-documented audit trail is also important. The audit trail records the research process, as well as the decisions and choices made by the researcher. It can enable other researchers to easily reconstruct or replicate the research. It also enables someone to challenge or confirm the interpretation of the data made by the researcher. Audit trail procedures followed in this research are documented on pages 25-27.

Research Methods

A qualitative approach using semi-structured interviews conducted face to face was employed to discover how geography teachers, from different secondary schools, made sense of implementing the NCEA assessment changes at Year 11. I considered this to be the most appropriate method for encouraging the participants to talk openly about their NCEA implementation experiences in their own language and meaning constructs. By empowering the participants to talk about their views and experiences in depth the use of semi-structured interviews provided me with opportunities to collect explorative and descriptive information.

The Participants

The six case participants in the semi-structured interviews were purposefully selected using the following guidelines. The subject participants chosen were:

1. Currently teaching Year 11 geography.
2. Involved in the implementation of Level 1 Achievement Standards for NCEA.
3. Selected from different types of schools e.g. two single sex schools, two large coeducational schools, two smaller schools (to enable the possibility of varying perspectives to emerge).
4. Three of the providers had previous experience with standards-based assessment and three minimal experiences in its use.

The case study teachers were all from the greater Christchurch area. I knew all of these teachers professionally through my working contacts as a Lecturer at the Christchurch College of Education and through my involvement in the Canterbury Geography Teachers' Association, the

New Zealand Board of Geography Teachers and as a regional facilitator for Unit Standard and Achievement Standards Training.

Three female and three male teachers participated. The school sizes varied and included state, private, integrated, co-educational and single sex school types. All schools were city based, apart from one that could be described as semi-rural. The six teachers involved in the study were trained geographers. The sample selected reflected a range of teaching experience. All schools and teachers involved in the study have been given pseudonyms. The schools and teachers are as follows:

- (a) Janet works at Larch High School a large single sex, state, city school. She is an experienced teacher and Head of Department (HOD) and has had involvement with unit standards and grade related criteria. In 2002 she had a Year 11 geography class with twenty-six students.
- (b) Karen has been teaching at Beech College a co-ed state school since 2002, when she was appointed as HOD. She has over ten years teaching experience and has taught in several schools. Karen is familiar with both unit standards and grade related criteria assessment approaches. In 2002 she had a Year 11 geography class with twenty-six students.
- (c) Ruth teaches at a Willow College a single sex, private school. She has been teaching for eight years and used grade related assessment and attended unit standards training. In 2002 she had a Year 11 geography class with twenty-one students.
- (d) Jim was a first year teacher in 2002 at Elm High School a small state, integrated composite co-ed school. Jim introduced geography as a teaching subject in Year 11 beginning with a class of five students but reduced to four at the time of the study.
- (e) Henry is an experienced teacher and HOD at Oak College, a large single sex, state school. He was involved with unit standard trials in geography at the Year 12 level and used grade related criteria at Years 11-13. In 2002 Henry had a Year 11 geography class with twenty-six students.
- (f) Paul is an experienced teacher and HOD at Matai High, a large co-ed, state, city school. In 2002 he taught a Year 11 geography class with 30 students in it. He has attended unit standard training and uses unit standard assessment in teaching tourism.

All of the teachers interviewed were Head of Geography Departments apart from Ruth. When interviewing Ruth at this school the HOD was also present. This HOD has been referred to as Dave for recording and reporting purposes. Dave did not teach a Year 11 geography class in 2002.

Research Questions

The key research questions involved were

- How are geography teachers making sense of (managing) implementing NCEA related assessment changes at Year 11?
- What is helping / hindering the implementation process?
- What impact has NCEA related assessment had on Year 11 geography teaching and learning programmes?

Supplementary questions, in no particular order, for use during interviews included:

- How many years have you been teaching Year 11 geography classes?
- What number of pupils are in your Year 11 geography class(es) this year?
- What prior knowledge of and experience have you had with standards based assessment?
- What is your personal understanding of the NCEA qualification and related achievement standards based assessment approach? (E.g. how does it differ from other forms of assessment? What do you consider to be the perceived strengths/weaknesses of this approach? How have your perceptions come about? Are your views the same as the other members of your department?)
- What were the main challenges faced regarding the initial implementation of NCEA at Level 1 geography?
- What support systems have been available to implement the Level 1 geography NCEA requirements?
- Which of these support systems do you consider to have been most valuable?
- How transparent do you find the Level 1 geography assessment criteria for teachers and students?
- What obstacles / concerns have you encountered in implementing the geography achievement standards?
- What processes / procedures have been involved in integrating the NCEA assessment changes into classroom practice? (E.g. use of formative assessment and prior

knowledge, preparing / informing students at Year 11 and Years 9 and 10? Designing activities and schedules, moderation systems, school wide assessment policies such as authenticity, reassessment etc.)

- Which aspects of achievement-standards based assessment do you feel most confident / least confident about doing? (Do you feel confident in: making consistent judgments in relation to student work?)
- What changes, if any have you had to be made to your Year 11 teaching programme?
- Do you feel the grades being achieved by the students fairly reflect their ability? How would you best describe student attitudes towards the achievement-standards based assessment in geography?

Interviews

Two interviews were conducted with each of the participants. Peers on the National Geography Assessment Panel and the regional geography advisor critiqued a draft copy of the invitation / information letter, including the focus questions, prior to posting to ensure credibility. The first interview was conducted towards the end Term 4, 2002 and the second in Term 3, 2003. The reasons for the second interview was to look at how perceptions and practice may have changed almost one full year after the initial implementation, and to gain feedback from each provider relating to the nature of externally assessed end of year examination papers, the resulting grades awarded to the students, and the examiners reports. The second interview was to be conducted earlier but the release of the examiner reports by NZQA had been delayed.

The semi-structured interviews all followed the conventional sequence of beginning with a personal introduction; a statement assuring the confidentiality of the interview, and double-checking permission was gained to have the interview audio taped. A non-threatening question was asked first to help put the interviewee at ease followed by the questions from the interview guide asked in an order chosen to best capitalise on the responses being made. (This practice was trialed on a colleague prior to conducting the first interview.) To gain an in-depth understanding of the interviewee's perception regarding the implementation of the NCEA related assessment changes probes were used when considered necessary to gain further elaboration and / or seek clarification of the responses made. As the interviewer, a conscientious effort was made to: listen more than I spoke; to put the questions in a clear non-threatening manner; to look as if I was enjoying the interview; and to avoid giving cues which could lead the respondent to answer in a particular way. Each interview closed with a thank you after checking the interviewee had no

more points they would like to make in regards to the implementing the NCEA related assessment changes.

Part of the audit trail for this study included making brief written notes, reflecting on each interview, immediately after its completion, and transcribing the tape soon after each interview. For ethical reasons information identifying the participants was changed or excluded from the transcripts and the audiotapes wiped. A personal letter of thanks was sent to the six participants expressing my appreciation of their input. In addition to the interviews each school was requested to provide a copy of their NCEA assessment overview plan for both 2002 and 2003. The purpose being to analyse the programmes for similarities and differences between the schools and to identify assessment planning changes within schools between the first and second years of implementation. Again for ethical reasons the school programmes were kept confidential and all identifying information either changed or deleted.

Data Analysis

The data collected from the semi-structured interviews was analysed inductively for re-occurring themes. The analysis involved coding and categorising the perspectives of the six providers interviewed into common themes and sorting variations of these themes into subgroups. To achieve this each transcript was read through several times to get a sense of the whole. Next, each transcript was read carefully asking what is this about, and what is the underlying meaning / perspective? Key words were highlighted and possible coding categories were recorded in the margins. Following this process the transcripts were analysed together in an attempt to cluster similar viewpoints and unique viewpoints. The emerging list of coding categories was then checked against the transcripts and new categories that may have been missed earlier were looked for. Final decisions regarding categories were made and data belonging to each category coded, and information was assembled for further analysis.

In this way, the transcripts went through a systematic analysis of firstly reducing the data down to a number of identifiable categories and sub categories. Secondly coding the transcript data according to these categories. Thirdly cutting, pasting and reconstructing the transcripts on separate pages under the category headings allowed key themes according to the providers' perspectives to emerge.

Document analysis of Year 11 assessment programmes for 2002 and 2003 provided by the participants was also carried out. Examination of these helped to add to the meanings emerging

from the interview transcripts in regard to programme changes made over the two year period. Another aspect of qualitative research employed was the use of field notes as referred to in the audit trail. Brief jottings were made during and after the interviews. This method was used to record initial hunches and themes. This self-memoing process continued throughout all stages of data collection and analysis.

Methods of Verification

I addressed internal validity through the use of multiple data sources / perspectives. In this case looking for convergence between the providers interviewed on the same theme (double angulation). Peer critiquing, by two fellow Geography NAP members in regards to the intended research focus questions and key decisions such as possible coding method(s), was used to help validate the process being followed. The research focus questions were sent to providers in advance, so they could give consideration of how they were making sense of implementing the NCEA related assessment changes prior to the interview.

With regards to external validity it needs to be made clear that there was no intention to generalise the findings emerging from this study. Peoples' perspectives and interpretations of aspects of the NCEA implementation are expected to be different. The uniqueness of the study also means there are limitations in attempting to replicate it, especially in another context. However the research findings were compared with the findings from other relevant reports such as

- 1) The NCEA Implementation Questionnaire, sent out with the New Zealand Board of Geography Teachers' (NZBoGT) 2002 Teacher External Exam Survey.
- 2) The PPTA (2002) NCEA Result: Not Yet Achieved, executive summary paper presented at their Annual 2002 Conference.
- 3) The Education Review Office (2004) report on Progress of NCEA Levels 1 and 2, and readiness of Schools to Implement Level 3.
- 4) The PPTA (2005) Teachers talk about NCEA: Research report on focus groups with secondary teachers authored by Judie Alison.

Reporting Outcomes

The research outcomes emerging from the semi-structured interviews conducted with the six informants are reported (in Chapter 3) in a descriptive, narrative form in order to capture their perceptions and meanings they attach to them. Italics are used to indicate the direct quotes taken from the interview transcripts.

Ethics

Careful attention was given in this study to the ethical issues outlined below:

- Guaranteed anonymity of participants and their related schools.
- Confidentiality of information collected.
- Consent for publication of project results.
- The right for participants to withdraw at any time.
- Credibility of research.

Dealing with the above ethical issues:

The teachers were sent letters explaining the nature of the research being undertaken along with advance copies of the broad questions for the semi-structured interviews.

A consent form attached to each letter sought 1) the willingness of participants to be interviewed, 2) permission to audio tape the interview, and 3) consent for publication of project results. The letter also explained confidentiality regarding responses to ensure that neither the respondents nor their schools would be specifically identified, and the right to withdraw at any time. Dates for possible interview times were indicated and a place for the participants to name their preferred choice of location for the interview provided. Copies of the information letters and written consent forms are attached in Appendix 1.

To maintain confidentiality these informants are referred to by pseudonyms and school names were not specifically referred to but given names of trees as nom de plumes.

Prior to each interview, a statement assuring the confidentiality of the interview was made and double checking the permission to have the interview audio taped, was ascertained.

The Christchurch College of Education Ethical Clearance Committee approved the research proposal. Appendix 2 contains a copy of the Application form used for Ethical Approval and the letter granting approval from the Ethical Clearance Committee. The only people to have seen the data collected are the researcher, the typist / transcriber and the supervisors. The data will be kept for a period of four years and used specifically for this thesis and any related conference papers, journal articles or reports that may follow.

In addition to the semi-structured interviews, results from the annual (NZBoGT) Geography Teacher External Exam Survey for Year 11 were analysed for emerging themes. Teachers completing this survey were informed that while the generalised findings may contribute to research, the anonymity of schools and participants was guaranteed.

Chapter Three: Presentation of Results

Introduction

The research outcomes emerging from the data analysis of the semi-structured interviews conducted in 2002 and 2003 are outlined in this chapter. The teachers' perceptions regarding the implementation of the Level 1 geography achievement standards are reported under different themes. The themes cover a variety of aspects including perceived challenges, factors supporting and hindering the implementation process, transparency of the geography achievement standards, impressions of the external NCEA examinations, modifications to Year 11 geography learning and assessment programmes, and teacher confidence. Changes to teacher perceptions and implementation practices over the time period between the two sets of interviews are discussed in relation to each theme. Direct quotations are utilised to help capture similar and unique provider viewpoints.

Setting the scene

Implementation of Level 1 NCEA in 2002 represented a marked shift in the assessment approach used by schools for national qualifications. The NCEA qualification, as indicated previously, uses a standards-based approach whereby any student achieving a predetermined standard is credited with that achievement. The approach differs considerably from the Year 11 School Certificate norm-referenced based qualification in use until 2001 that identified achievement by ranking or comparing students against the performance of others. With norm referencing the percentage of students who can achieve in each subject is predetermined, and the percentage is achieved by adjusting student results accordingly.

To help prepare teachers make the required paradigm shift in assessment all schools received subject related professional development NCEA related workshops (generic and Level 1 specific) facilitated by the Ministry of Education leading up to 2002, monthly NCEA Update newsletters, and had access to achievement standard-based assessment resources on the TKI and NCEA websites and to the NZQA 0800 Helpline. All but three of the geography teachers in the six case study departments surveyed had attended the generic NCEA and Level 1 professional development workshops. One was employed overseas in 2001 and the other two were involved in training as beginning teachers. Five of the six case study geography departments surveyed had staff members with previous training in the use of standards-based assessment in geography. This was through attending Year 12 geography grade related criteria (also known as achievement-based assessment, ABA) and / or unit standards based training workshops. Three of the

geography departments have been offering assessment against unit standards at one or more levels since the time of their introduction in the mid 1990's.

Although the focus of this research is based on the implementation of Level 1 geography achievement standards at the department level, it inevitably takes into account the adherence to school wide and national NCEA assessment related policy and procedures. In terms of NCEA offering a mix of externally and internally assessed achievement standards geography as a subject have been fortunate. The 1990 geography syllabus prescribed a 34% internally assessed component and a 66% externally examined component. This requirement provided geography teachers with prior experience of managing many practical and procedural aspects of conducting internal assessment, albeit often at a departmental than school-wide level. Although School Certificate geography involved scaling of the internally assessed course component against the external exam results for national moderation purposes, the three case study schools offering geography unit standards had experienced external moderation procedures similar to although not identical to those planned for NCEA.

The results that follow indicate that the implementation challenges and needs of the six geography departments in the survey were not always identical. However by the end of 2002 each department had implemented NCEA geography at Level 1. In the process they had also become aware of the excessive use of assessment in programme delivery. Their main focus for NCEA Level 1 geography in 2003 was twofold, to review and fine-tune the initial implementation processes as time permitted, in conjunction with taking measures to ensure that NCEA assessment requirements did not play an over-dominant role in geography classroom teaching and learning. The desire was to find ways to assess learning smarter using more targeted and manageable practices.

Emerging Themes

The data has been grouped into seven emerging themes each dealt with in separate sections as indicated below.

Section A. Perceived challenges.

Section B. Factors supporting implementation.

Section C. Factors hindering implementation.

Section D. Transparency of the Level 1 geography achievement standards.

Section E. Impressions of the Level 1 2002 external examination papers.

Section F. Changes resulting to teaching and learning programmes.

Section G. Confidence levels.

Section A. Perceived Challenges

Key challenges to emerge from the interview round conducted in 2002, regarding the initial implementation of NCEA Level 1 geography, included:

1. The increased workload and time involved in
 - a) sourcing and designing valid assessment activities and schedules, and
 - b) managing the NCEA assessment programmes.
2. Interpreting the achievement standards, including identifying ‘the national standard’.
3. Making the paradigm shift from norm-reference assessment to standards-based assessment.
4. Adjusting to school wide NCEA assessment systems.

These implementation challenges did not apply uniformly to all of the six case study departments surveyed. The viewpoints expressed by interviewees varied according to factors such as departmental size and teaching experience including the use of other forms of standards based assessment practices in geography such as ‘grade related criteria’ and ‘unit standards’.

A1. Increased workload and time involved

a) Sourcing and designing valid assessment activities and schedules.

The workload, especially the time involved in accessing and or designing sufficient numbers of valid achievement standard based assessment activities and schedules was reported as the major challenge and focus of departmental activities leading into 2002. The workload, particularly for the smaller geography departments with only one or two staff members, was considered to be demanding. The following quotes provide an insight into the nature of the challenge.

Jim stated

‘One of my biggest challenges was to get and make assessment activities for my programme. I used ones off the web but I needed more time to change them round, and to find other activities for the trials and resits.’

Ruth agreed

‘A major challenge, I think for staff to begin with, was the workload involved in modifying existing and developing new assessment activities for NCEA ... working from the exemplars that we later found were flawed didn’t help.’

Karen concurred

‘The challenge I think has been to have enough valid assessments for formative, summative and reassessment opportunities. We had written some assessments last year which we trialed and then modified ... but to find another two to be just as good and as valid ... and to give the students as much interest, was difficult’.

It is interesting to note at this point that a common belief held in 2002, was the perceived need to have assessment activities for formative, summative and reassessment purposes for each of the internally assessed geography achievement standards (apart from the research standard Geography 1.5 where a reassessment opportunity was not always possible due to time constraints). This notion, disseminated during the 2001 Level 1 NCEA Geography Teacher Workshops, impacted considerably on geography teacher assessment related workloads, beginning with sourcing sufficient numbers of valid assessment activities. Having a large department to share and spread this workload was definitely perceived to be advantageous in this respect as explained in section B7.

b) Managing NCEA assessment programmes

Analysing the 2002 geography Year 11 assessment programme plans for the six schools revealed an almost identical NCEA assessment format in terms of the number and type of assessments planned. For the internally assessed achievement standards, this involved having two summative assessment opportunities (the second one being for reassessment) for both the global topic (Geography 1.7) and the geographic issue (Geography 1.6) achievement standards and one summative assessment opportunity available for the lengthier research (Geography 1.5) achievement standard. The four externally assessed achievement standards each typically involved one formative end of unit type assessment activity, and at least one formative, revision type of assessment opportunity, normally conducted in schools during mid or end of year examinations. The use of formal formative assessment practice (i.e. a test) was also considered to be important in preparing the students for the internally assessed achievement standards.

Such Year 11 assessment programme plans typified the examples used during the 2001 Level 1 geography teacher training facilitation workshops (refer to Appendix 6). The increase in the total number of assessments required in these NCEA assessment programme plans were perceived by the interviewees as creating time management challenges in programme delivery as well as placing students under additional assessment pressure.

As indicated by Ruth

'In terms of workload at Year 11, I think we invented diagnostic and formative assessment opportunities this year [2002], which hadn't previously existed. This upped the workload ... we have used much more formative assessment than we have traditionally.'

Karen reinforced this

'Its difficult to find enough time to do formative, summative and reassessment testing ... for [achievement activities] 1.6 and 1.7 we have three assessment activities'.

The interviewees perceived that the nature of several of the geography achievement standards also contributed to workload pressures in terms of content coverage. The following examples were frequently cited. The global study topic (Geography 1.7) has not only been given greater credit weighting under NCEA but has also changed from being assessed in the external exam to being internally assessed by teachers in class time. The knowledge base required by the externally assessed achievement standards has increased under NCEA. For example, the PCT Population Studies (Geography 1.2) now includes the study of population related issues. All of the achievement standards also have new “Maori Concepts” and “Perspectives” identified for study.

Ruth succinctly alluded to such implementation challenges when she stated

'New issues relating to the timing of assessments, content coverage and the managing of increased teacher and student workloads have resulted.'

A2. Identifying the standard

Identifying the standard of work / evidence required to show the levels of achievement was highlighted as a challenge by four of the interviewees. The quotes below illustrate the differing nature in which this challenge was perceived.

Within schools the challenge involved differentiating clearly, the grade boundaries between Non Achievement, Achievement, Achievement with Merit, and Achievement with Excellence.

For Janet the challenge of differentiating between achievement grades involved

'making sure we understood the boundary differences between an achieved and a merit, and between a merit and an excellence. Making that call, which is often quite fine, between the border lines of each of the grades.'

Anxiety also existed at this time as to whether the so-called ‘national standard’ was being applied in a consistent manner between schools, particularly in relation to the internally assessed standards.

The quote by Ruth below is indicative of the concerns expressed relating to the national standard.

‘I think there’s a lot of anxiousness and nervousness that standards between different schools can vary quite significantly ... I’m not sure but I think when we first set out with implementing NCEA, our assessment standards perhaps weren’t equal with the national standard, they were perhaps a bit higher ... I feel setting the standard correctly for the internals is still of concern.’

Interviewees also indicated that they found difficulty in adjusting their marking to a different concept set to which they had become accustomed. This was due to the standard having been lowered for the NCEA Level 1 ‘achievement level’, in order to encourage student success. The interviewees stated making the transition in marking from the ‘pass / fail’ standard they had recognised and become comfortable with under the former School Certificate norm-referenced system, to a standard they perceived as more generous for awarding an ‘achievement grade’ under Level 1 NCEA to be initially challenging.

Dave’s comment below is indicative of the above challenge.

‘Communicating the standard to us nationally is a problem that needs work. Whenever we address what the standard is, the conversation goes back to using your professional judgement and being cognisant of what standard you have called for in the past. But in the NCEA training, when we critiqued an activity and mark schedule the facilitator had a much lower expectation than I would’ve had and yet we had both been there and done that.’ (Dave is Ruth’s Head of Department)

A3. Making the paradigm shift

The challenge of making a paradigm shift from norm-referenced assessment practice to achievement-based assessment was raised by four of the interviewees. The challenge varied, as the selected quotes below indicate, from ensuring all staff and students were adequately prepared for the change, to overcoming attitudinal obstacles.

Janet's statement below outlines the need to prepare all staff and students equally for the NCEA related changes

'The challenge was bringing students on board... because we hadn't really adjusted our social studies assessments in all classes to ensure the students were used to grade related criteria ... some kids felt comfortable with it but others didn't ... so we had to help them make the paradigm shift. Some of my colleagues also had to make that paradigm shift ... and adjust to feeling comfortable with not giving numbers and percentages.'

Karen and Henry each had a new geography staff member start in 2002. These staff members needed additional assistance in making the paradigm shift as they had not received initial NCEA training in 2001, and had either limited or no prior experience in the use of standards-based assessment.

Paul's challenge in making the paradigm shift was related more to addressing the attitudinal obstacles being held by some of his existing staff members. As he states

'Some of the staff held entrenched opinions and were negative towards the whole idea of having standard-based assessment being imposed on us.'

Although Paul's staff had received unit standards training in the mid 1990s, the standards had not been implemented within the department as members of staff were in favour of maintaining the status quo. As indicated in Section B8, departments with prior experience in the use of other forms of standards-based assessment tended to be more accepting of the use of achievement-standards, and found making the paradigm shift less challenging.

A4. Adjusting to school wide NCEA related assessment systems.

All of the interviewees acknowledged that NCEA implementation required more formalised school-wide (as opposed to departmental) assessment related policies to be put in place. They acknowledged these policies and procedures took some adjusting to.

Henry, for example, indicated that

'It [NCEA] has involved formalising a lot of things that in the past we have just taken for granted. It's required making sure that formal systems are in place for things like internal moderation of assessments, verification of student results, authenticity and the like.'

He elaborated further

‘I’ve found it more demanding getting the mechanics of these systems set up ... and with four Year 11 classes it’s obviously a bit more difficult. Implementing it [NCEA school wide systems] has been more of a logistical or mechanical problem than a philosophical problem.’

Paul concurred

‘It has involved being more structured in setting up some of the internal things. We’ve had to be more careful than we have been with systems in the past ... and ensure everybody is following the same policies.’

Implementing Level 1 NCEA required a significant shift in the way learning in geography was assessed. Perceived challenges by the interviewees leading into the first year of implementation involved ensuring all staff and students were adequately prepared for making the paradigm shift from norm-referenced to standards-based assessment, interpreting the standards and finding time to source sufficient valid achievement-standard activities and schedules to implement their assessment programmes.

Section B. Factors Supporting Implementation

In addressing the challenges referred to in the previous section the interviewees identified a number of support systems that they found valuable in implementing NCEA Level 1 Geography. These included:

1. NCEA facilitation workshops.
2. Social science advisor assistance.
3. Availability of NCEA resource materials.
4. Formal networking with other schools.
5. Informal networking with other schools.
6. Role of the Canterbury Geography Teachers’ Association (CGTA).
7. Geography department size.
8. Previous experience of standards-based assessment.
9. School professional development time.

The value the different case study schools placed on the support systems referred to above varied depending on each individual department’s circumstances. Because of this items are not necessarily ranked in order of significance.

B1. NCEA facilitation workshops

The facilitation workshops, in addition to providing important background assessment information and planning time, were also perceived as an invaluable forum for geography teachers to network, share ideas and discuss issues.

For Henry

'The facilitation days were very useful, especially the early ones, because we were all very, very green on it [NCEA and achievement standard-based assessment].'

Paul concurred

'The training days last year provided a good start. They tended to be where a lot of our information came from and I think raised lots of questions that we needed answers to.'

Janet particularly valued the opportunity given to have dialogue with other geographers, as did the other interviewees.

'I think the facilitation meetings were great. They provided a chance to plan and share ideas ... we could go and talk with other geography teachers doing the same things ... and you could 'chew the fat' with them.'

B2. Social science advisor assistance

Smaller departments in particular mentioned the importance of having the regional social science advisor available to provide guidance and support. They appreciated having an outsider to act as a sounding board to seek feedback from regarding their proposed assessment activities and programmes.

Jim, a beginning teacher in sole charge of geography, valued the guidance provided.

'The social science advisor was very helpful. He was able to assist me in getting a good year plan ... spreading it out so that I had my internal achievement standards linked in at different stages during the year, and fitting in the trial activities and reassessment opportunities that I needed. He was also very good at recommending which exemplars on the web were good ones and which ones weren't, and what changes if any needed to be made to them.'

Janet also appreciated advisor collegiality and feedback.

'Just to have someone come in that you felt comfortable with, who was on the same wavelength about achievement standards ... yeah ... I felt they provided very good feedback.'

Karen similarly valued making use of the advisor as a sounding board.

‘I’m not the only geography teacher here, I’ve got a provisionally registered teacher who has taught for three terms now ... but I sometimes feel I am on my own ... so I have appreciated the advisor coming here and giving me feedback on my assessment activities. I basically used him as the head of department ... and asked what do you think of this? And he’d give me suggestions.’

It appeared that the larger departments were better placed to critique their own NCEA assessment programmes and to provide peer feedback internally.

B3. Availability of NCEA geography resource materials

Resource materials referred to by six case study schools as being helpful in the implementation of Level 1 NCEA geography were the:

- Ministry of Education Te Kite Ipurangi (TKI) NCEA website www.tki.org.nz/e/ncea.
- NZQA NCEA website www.nzqa.nz/ncea/.
- Auckland Geography Teacher Association (AGTA) Geography CD Rom: NCEA Level 1 Internal Assessment.
- New Zealand Board of Geography Teachers (NZBOGT) Geography CD Rom: Level 1 External Assessment.
- MoE Implementation Support Material – A Resource for Hods and TICs to help implement NCEA Level 1 Geography, compiled by the national facilitator for geography.
- NZQA 0800 help line.

The following quotes by Henry and Paul are indicative of how these resources were valued in implementing Level 1 NCEA.

For Henry the resources provided a valuable starting point.

‘The material that’s been put out by the Ministry, even though it did need a considerable amount of tweaking, helped a great deal... Yeah, we’ve been quite well served by a variety of agencies, whether it has been NZQA, TKI or the various organisations like the Auckland Geography Teachers Association, Board of Geography Teachers and so on... although a lot of stuff didn’t suit us exactly it provided a basis... you had to take it and modify it for your own use. And I think the Implementation Support Booklet that Linda Miller was involved in was super, really helpful. So the assessment thing and setting up tasks hasn’t been such a problem.’

Paul agreed

'We utilised the TKI website, and also had the Auckland CD Rom at our disposal. These offered exemplars for each of the internal standards. Having the ability to modify these on a computer screen was helpful. So yep we used those.'

Both Jim and Paul referred to the use of new electronic data packages, such as 'Classroom Manager', as being valuable tools to assist the recording and reporting of achievement standards related data.

B4. Formal networking with other schools

Both Karen and Ruth were part of a group consisting of 5 to 6 schools, which collaborated on producing an exam package for Year 11 geography. They found working collaboratively with geography department members from different schools to be worthwhile.

Karen's perspective

'I got involved with a group of schools and I worked with them, mainly on the external achievement standards, looking at writing mid and end of year practice exams and it was really good. What I had been planning wasn't really wrong, but having those links beyond the school helped make it better. We shared quite a bit of stuff.'

Ruth's experience

'We got together with a group of other schools and formed 'GEOG CORP'. We had meetings ... cluster group meetings... and sort of provided each other with assessments, and there was a lot of feedback. We actually ended up with a CD ROM with the exemplars on and that was fantastic. This was just a group of local schools that got together.'

During 2003 Jim met with two other sole geography teachers from small rural schools in the North Canterbury region to plan NCEA programmes.

Jim was very positive about the spin offs gained from networking.

'It was great we sat down and planned out our Year 11 and 12 assessment programmes together ... we make sure we get the right things done at the right time. Mr... [the more experienced geographer] was able to tell me what ideas worked well for him and what didn't. The three of us have planned for a combined coal mining field trip to the West Coast next year.'

B5. Informal networking with other schools

Three of the interviewees found it reassuring to make informal contact by phone or e-mail with colleagues at other schools both within and / or outside the local region. This did not involve sharing resources, but rather making progress checks, discussing ideas or sharing concerns.

For Henry

'I've been in contact with X and Y schools on an informal basis ... not sharing resources just ringing. "We don't have a problem, how are you doing?" Just things like that ... keeping up with the play.'

Janet felt more contact with colleagues would be desirable.

'I had contact with some of my colleagues at other schools through our regional teachers' association ... though I think we could improve that a lot more. I mean I had a lot more of an exchange of ideas with some of my old colleagues at my previous school in Wellington than I did with anybody within the Christchurch region. I think we need to improve that really.'

B6. Role of Canterbury Geography Teachers' Association (CGTA)

Several participants acknowledged the role of the regional CGTA in providing opportunities for geography teachers to meet and discuss the implementation of level 1 NCEA. However some felt that the association could have been even more proactive in this regard.

Paul indicated that for him

"Attendance at the geography teacher association days have been important."

Janet felt the CGTA could have offered more.

'Opportunities for contact with other schools were available through our regional geography association meetings ... though I think we could have improved that a lot more and also provided assessment resources with a local flavour.'

Ruth agreed with Janet's sentiments

'In terms of networking and sharing I don't think the CGTA has done a good job.'

B7. Geography department size

In general the larger geography departments, particularly those with a number of experienced teachers, tended to find the implementation process less challenging. They found it easier to share the workload through the delegation of tasks, provide peer critique on each other's contributions, conduct internal moderation and engage in debates on NCEA related issues within their own ranks.

As Henry acknowledged

'The job's been made a lot easier in a reasonably big department, which we are, we have been able to share out a lot of the jobs ... that has been special.'

Paul concurred

'There are four full time geographers. One's a first year teacher but the rest of us have been around a long time ... and that informal support from their experience... yeah ... was helpful ... we were able to work our way through lots of questions raised in last years training days and share out tasks.'

In contrast with the sentiments expressed by teachers from the smaller departments in Section A1, the two interviewees representing larger departments implied that their workloads involved in gaining sufficient numbers of valid assessment activities and schedules, were not as onerous.

For example, Henry stated

'I haven't had too many problems because of I've got a pretty experienced staff... three of us already had had standards based assessment experience ... I think all of my staff have been pretty supportive in going ahead with it [NCEA] you know, accepting it, and then contributing to finding and setting up the tasks, trialing them, marking, giving feedback and the like.'

Paul sentiments were similar to Henry's.

'In terms of teaching, there weren't very many challenges ... the implementation of the internally assessed components, we were quite happy with. We were disappointed with a number of the exemplars, particularly those we'd used and then discovered had become invalid... but, in terms of putting the programme together, it hasn't been too much of a problem.'

Karen implied a similar scenario existed in her previous school during 2001 where she was a member of a large geography department.

'We were really organised in my last school and spent a lot of time in 2001 planning what we were going to do. We had written some assessment activities and trialed them as well. We weren't finding the implementation too bad actually.'

B8. Previous experience of standards-based assessment

Interviewees indicated that staff with previous standards based assessment practice, including the use of geography unit standards and / or grade related criteria, found it easier to develop an understanding of achievement standard assessment.

As Henry stated

'I've got a pretty experienced staff ... three of us have been involved with unit standards ... so there's been no problems there, but I have a new teacher, who's teaching Year 11 for the first time ...and I've had to do a fair bit of work with him.'

As indicated in the Obstacles Hindering Implementation Section (C4) that follows, staff without previous standards-based assessment experience tended to find it more difficult to make the paradigm shift or transition towards using achievement standards. Paul and Janet implied that such staff also generally tended to be the ones who were more resistant to the proposed changes.

B9. School professional development time

In-school professional development days in 2001 provided valuable time for geography departments to help plan in advance for the implementation of NCEA. Finding sufficient time available to prepare for the implementation during the lead up year was an ongoing issue for all of the geography departments.

As Paul summarised

'Having in-school training opportunities offered was particularly helpful ... in giving the department breathing time to talk and plan.'

Section C. Obstacles Hindering Implementation

In addition to valuable support systems the participants also referred to a number of obstacles that hindered their progress in implementing Level 1 NCEA geography. These included:

1. Flawed exemplar materials.
2. Late arrival of the external exemplars resources.
3. Lack of security with TKI and NZQA website exemplar materials.
4. Negative staff attitudes.
5. Suspicion regarding uniformity of practice between schools.
6. Aspects of external moderation.
7. Additional syllabus workload requirements.
8. Delay in the examiners report.
9. Rushed implementation timeline.
10. Reprographic costs.

The level of hindrance created by these obstacles varied depending on the individual circumstances of each geography department.

C1. Flawed exemplar materials

All of the interviewees agreed that the availability of valid, quality-assured internal assessment exemplar materials on the TKI website, as initially promised by the Ministry of Education, would have reduced teacher workloads and improved confidence levels as they prepared for the implementation of Level 1 NCEA. Unfortunately, the appearance of variable quality, and sometimes flawed geography exemplars on the TKI website appeared to have the reverse effect. Interviewees discussed their loss of confidence in the exemplar materials, and the feelings of anxiety and frustration created by the extra workload that resulted. The selected quotes below typify the interviewee perceptions relating to the internal exemplar materials that were available.

Jim was taken by surprise

'The first exemplar I used was off the web (TKI), I later found out it was faulty ... I didn't know that before I had used it, it looked fine to me ... I was shocked when I found out that other exemplars were also substandard ... not up to scratch.'

For Karen the faulty exemplars created frustration and stress

'The invalid assessments on the [TKI] website is a major concern ... I lost faith in what was on the website when I got a list about the website stuff saying "not valid" or "valid with modifications" ... I mean what modifications? ... I wanted to know what the modifications were. Why weren't the modified versions being put on the web for us to use? ... It's very frustrating. I have used some of the faulty scaffolding from the web activities to create my own assessments ...

I'm now starting to worry about what I have done ... it is quite stressful coming up to moderation and to know whether you've actually done justice for your students.'

Paul implied that the faulty exemplars led to negativity

'I think people might have been more confident and their attitudes more positive if the original exemplars had been first rate and problem free. Some of the materials used on the web and used at training days were less than ideal and created a negative backlash.'

Ruth lost confidence

'The exemplars provided when you looked at them carefully ... were full of holes and did not inspire confidence. I would rather they had said these assessments may contain flaws rather than saying they were quality assured.'

In 2003 concerns still existed regarding the nature of the geography Level 1 exemplars found on the Ministry of Education TKI and to a lesser extent the NZQA websites. Jim, Janet, Henry and Ruth all commented on the substandard quality of the exemplars. Descriptors they used included they *'still contained flaws'*, *'were not watertight'*, *'had lots of mistakes'* *'poor in layout'* and of *'variable quality'*.

They agreed with Janet's acknowledgment

'The exemplars contained several good ideas but needed a specialist geographer to edit and moderate them.'

Both Janet and Jim also made the point that it would be beneficial /convenient

'If both the internal and external exemplars were located on the same website ... and the problem of student access to the exemplars on the web was overcome.'

C2. Late arrival of the external exemplar resources

The late arrival of external exemplar material on the NZQA website was mentioned by three of the interviewees as an obstacle. Teachers were hoping they would be available early in the year for reference purposes, or at least half way through the year for possible use in mid year exams.

Ruth clearly indicated the nature of the problem.

'Uncertainty about the nature and content of external achievement standard papers I think was a concern ... sort of trying to prepare for the exams but not knowing what would actually be

assessed because we had nothing. This was partly due to the lateness of their [exemplar examination papers] arrival on the NZQA website ... so everyone was sort of anxious.'

The interviewees also indicated that they would have liked to see more than one external exemplar provided for each of the externally assessed achievement standards (for use in mid and end of year practice exams). To some extent the concerns regarding lateness and having more than one exemplar was offset by the availability for purchase of the NZBoGT Level 1 CD Rom containing external exemplar resources.

C3. The lack of security with TKI and NZQA website exemplar materials

A related concern expressed by the interviewees, was the lack of security surrounding the geography exemplar activities being made available on the TKI and the NZQA websites. They indicated that students in the know, had easy access to the assessment activities and schedules found on these web sites, creating issues of authenticity and fairness surrounding student work. This situation meant that these exemplar materials were not ideally suited for summative internal assessment purposes.

Paul gave the following example

'Kids are getting access to the geography exemplar information [activities and schedules] from the TKI website and using it to their advantage. In one particular geography class only three kids got excellence, and their answers were presented virtually word perfect straight off the website schedule.'

Modifying the exemplars to address security and authenticity problems, as was clearly pointed out by the interviewees, contributed further to their implementation workload. To some extent the concerns regarding security issues was offset by the availability for purchase, of the AGTA's Level 1 CD Rom containing internal exemplars. However, these again needed modifications to suit local or regional geographic studies.

C4. Negative Staff attitudes

Negative staff attitudes were referred by two case study schools as contributing to initial resistance to implementing NCEA Level 1 geography.

Janet indicated

'A number of staff didn't have a shared belief in NCEA assessment and I think that stood in our way. Students were hearing from teachers who were opposed to it [NCEA] ... and for some kids who were already anti, that just built up more resistance ... you know ... I had kids saying, "I don't like this system, it's useless, it sucks." We, and the school needed to do a lot more talking about the philosophy behind NCEA.'

Paul's perspective

'I don't think the implementation process has been as straight forward as some people thought it was going to be. I think probably due more to attitudinal problems or obstacles, than structural ones. Some of the geography staff here were negative [re the introduction of NCEA]. My own attitude to it was well we are going to have to do it, so lets just get on with it.'

Staff holding negative attitudes, in most instances, were advocates of norm-referenced assessment and had deliberately resisted the introduction of the geography unit standards into their teaching practices.

As Janet indicated, the challenge was to help such colleagues to

'make that paradigm shift [towards standards-based assessment] and adjust to feeling comfortable with not giving numbers and percentages.'

C5. Suspicion regarding uniformity of practice between schools

Interviewees also reported a degree of suspicion about how policies and practices were being applied in different schools. These concerns included:

- The number of reassessment opportunities being made available.
- The availability of resubmission.
- The practice of not submitting results for students 'non achieving'.

Variations in school policies and practices were perceived as contributing to a level of uncertainty and mistrust in the teachers' minds, as they created unequal playing fields in school approaches taken with students.

Henry gave the fullest account.

'I think there has been a little bit of diffidence and suspicion about the strength of the whole system ... about how it stacks up with systems we have had in the past. Not so much within an institution because I feel confident that the way I'm doing things is as rigorous as perhaps it has

been in the past ... but what is school B down the road doing? I'm not exactly confident that a lot of other people are being entirely fair ... there is a couple of examples that I've heard around the traps ... you know like not submitting any non achieved grades or chopping students out from entering, allowing resubmission chances that sort of thing.'

NZQA interpretations regarding resubmission opportunities and not entering results for students non achieving in internally assessed activities had not been clearly communicated at the start of 2002, and this added to the level of teacher confusion and suspicion. The NZQA policy in some regards appeared to be evolving over time. NCEA Update Issue 11 May 2002 for example indicated it may be appropriate to use resubmission rather than have a student repeat a whole assignment. This was different to the message given in training workshops and created confusion as well as annoyance at a change being implemented part way through the year.

Concerns, as referred to in Perceived Challenges (Section A), were also expressed about how different schools applied assessment schedules for the internally assessed standards. Common questions raised by the interviewees were *'Are schedules being applied in the same ways?'* and *'Are we exceeding the national standard?'*

This particularly related to the making of 'holistic judgments'. They found the model of holistic marking discussed at the facilitation workshops to be unclear and believed more direction was required if it was to be applied in a uniform manner.

As Ruth outlined

'I don't think there is a clear model of holistic marking. The jargon came out at the first NCEA workshop but no categorical statement about what it meant has been given. Interpretations are always prefaced by "this is my interpretation" ... so it is difficult to comprehend.'

In 2003 Henry still expressed concerns regarding the practice being used by some schools of withdrawing student entries, as opposed to recording a 'not achieved', when the students had not achieved the standard for a summative internal assessment.

C6. Aspects of external moderation

A range of different perspectives was provided regarding external moderation of the internal achievement standards. While Janet felt she benefited from the moderation process, having received a 'big tick' for the work she submitted, others were not so happy. A common concern related to the long delay in receiving feedback on the work sent in for moderation. This could be

partly due to the NCEA stop work related industrial action requested by the PPTA. Karen and Jim however found the lack of feedback or explanation provided by their moderators, as to why an activity or schedule was invalid, was most unhelpful. They both identified the general lack of guidance on how to overcome the moderation concerns, as well as the long delays in the return of assessment items, as being implementation obstacles.

During 2003 there was a consensus that written comments made by the moderators were generally more constructive and helpful, indicating explanations for how an assessment activity / schedule or judgement made in assessing student work may have erred. Although considered unlikely to happen, a preference was expressed by several of the informants to have direct contact with the moderator via phone or e-mail to resolve problems instantly through discussion. This, according to Henry, could help circumvent any ambiguity plus reduce long turn around times.

There was also concern expressed by Janet and Paul regarding having only one internal achievement standard moderated per level per year. They felt under this system, students could be sitting invalid activities without staff or students realising the results awarded were invalid. They preferred to see moderation of both the assessment activities and schedules carried out in advance of them being used with students, as was the case under the earlier Unit Standard moderation system.

While acknowledging moderators needed time to learn their process, Janet and Henry raised concerns about variability in moderator decision-making. A specific example was cited in each case, whereby two schools had submitted identical activities and schedules to different geography moderators in 2002 and received markedly different moderator decisions. They felt such instances brought the credibility of the moderation system into question.

C7. Additional syllabus workload requirements.

Although the geography achievement standards are based on the existing syllabus documentation, the writers of the geography achievement standards took the opportunity to try and update the syllabus via the “backdoor”, as the MoE currently only allows for curriculum reviews not syllabus reviews. A number of changes and additions, as recommended by the New Zealand Board of Geography Teachers (1999) position paper, were incorporated into the standards.

Interviewees expressed concern that as such the achievement standards were adding more requirements to what they considered to be an already over crowded geography Year 11 teaching programme. They argued that the achievement standards required additional content to be taught including new terminology, perspectives and Maori concepts and terms.

Janet expressed the following concerns regarding the additional content requirements

'A concern in fulfilling the achievement standard requirements at Level 1 is we are now looking at 'sustainability' in the resources topic, and in the population studies topic we are now looking at 'issues' ... so we are now taking the students a lot further and giving them more depth of material. So, in fact this has required us to teach a lot more than what we've got in our current syllabus document. So what do we cut back on? This is what we are trying to tease out at the moment.'

There is too much to teach. The population studies topic is huge. I would really love to be able to teach population theories and ideas and apply them to New Zealand and a couple of Monsoon Asia examples rather than try to cover everything including issues ... I think we do too much in that, but I do not know how to get around it yet.'

While reinforcing Janet's concerns, Ruth also referred to the eighteen Maori concepts and terms and the additional perspectives (including Scientific, Maori, Gender, Age, Ethnicity and Feminist perspectives) that have been incorporated as extra requirements into the achievement standards (refer to Appendices 8 and 9).

As she indicated

'Maori concepts haven't figured largely in our teaching yet and so there will be, for this department anyway, a transition period required ... to elevate the status of these [Maori concepts] within the programme... and its the same for the perspectives in all the explanatory notes.'

C8. Delay in the examiners report

A concern expressed by the all of the interviewees during the 2003 interviews, was the long delay in the availability of the 2002 examiner's reports and schedules. They felt these should have been available by April 2003 at the latest, and not have been held back until late in term 3 before release.

As Henry stated

'It was too late to incorporate the ideas and advice provided into the topics we had already taught.'

Other interviewees who had used the 2002 external papers as the basis of their mid year practice exams in 2003, indicated disappointment in not having the 2002 assessment schedules available for marking student scripts. They also indicated they needed the 2002 examiners report available in order to give their student hints about 'what to do' and 'what not to do' prior to sitting their mid-year exams. The problem regarding security issues of having the NCEA external examination schedules placed publicly on the NZQA website was mentioned again in this context.

C9. Rushed Implementation Timeline

Karen and Janet felt the implementation timeline process was too rushed, particularly for small departments. In 2003 they had to focus predominantly on implementing Level 2 NCEA geography, leaving them little or no time to review and consolidate the changes made at Level 1 first. Henry and Paul, on the other hand, were able to reap the benefits of large departments and allocate staff to be responsible for each level. At Ruth's school, where they have only one geography class at each level, she was able to continue to concentrate on Level 1 while her colleague was implementing Level 2 geography. This enabled Ruth to fine-tune Level 1, and at the same time start making some preparations for implementing Level 3 in 2004.

C10. Reprographic Costs

Henry expressed concern with the increase in reprographic costs involved with implementing NCEA. He indicated costs related to the production of NCEA booklets issued to students at the start of the year and for the printing of all the formal formative assessment papers used with classes to prepare them for the four externally assessed geography exams, had major budget implications for the school.

Section D. Transparency of the Level 1 geography achievement standards

During the 2002 interviews, interviewees were asked how transparent (ability to understand and interpret) staff and students found the Level 1 geography achievement standards, registered in December 2001. In the 2003 interviews the teachers' perceptions of the changes proposed to these achievement standards were sought, following the review process that took place after their first year of use. The findings are outlined below.

D1. Transparency of the Level 1 geography achievement standards, registered in December 2001

Interviewees varied in their reactions to the transparency of the level 1 Achievement Standards. However most found aspects of the standards, at least initially, to create obstacles for implementing NCEA.

Henry found

'Initially we did not look closely enough at the achievement standards ... particularly the special notes. There is some quite detailed information in those. I have subsequently rewritten our scheme much more in relation to the explanatory notes and achievement standard criteria.'

Karen struggled with some of terminology used such as 'direction', 'consultation' and 'guidance'. She eventually worked out what was meant by 'direction' as used at Level 1 with ongoing reference to the activities found on the TKI website.

Ruth found some of the achievement standard terminology to be vague and ambiguous. She questioned, for example, whether the term 'issues' as used in the Population, Patterns, Processes and Issues achievement standard (Geography 1.2), meant the same as 'issue' used in the Examine a Contemporary Geographic Issue and Evaluate Courses of Action achievement standard (Geography 1.6).

As referred to under the earlier 'Identifying the Standard' (Section A), several interviewees expressed nervousness about trusting their professional judgment when differentiating between the grade boundaries (for achievement, achievement with merit, and achievement with excellence), and setting their assessment activities and schedules at the national standard. To adjust to the 'lowering of the rung' for an achieved grade at Level 1 as referred to in the training workshops, was also commented on as being a difficult adjustment to make.

As Ruth's colleague indicated

'In the NCEA training when we critiqued an activity and mark schedule, the facilitator had a much lower expectation than I would have had.'

In relation to students understanding of the achievement standards several differing viewpoints were provided. Henry and Jim indicated that the students were quick to come to grips with the terminology and jargon used in the geography achievement standards.

For example, in relation to the question ‘Have the students understood the achievement standard criteria and related terminology?’ Henry answered

‘Oh yeah they picked it up really quickly and very quickly worked out ways round it too. Initially I thought the achievement standards should have been introduced from Year 13 downwards ... but in retrospect, starting with Year 11 was probably the right way to go, because they haven’t had exposure to the other forms of assessment ... and they picked it [achievement standard-based assessment] up pretty quickly.’

Karen in contrast indicated that her students struggled to come to grips with the achievement standard requirements.

‘The students have really struggled with the terminology ... I have spent a lot of time on formative assessments going over requirements. I think how you scaffold the assessments helps the students with their transparency ... you have to be quite careful to make the words involved transparent to them, to actually help them through ... so they understand what they are doing to achieve.’

Janet also found that she had to spend time teasing out and communicating the achievement standard terminology for the students.

‘Well, you know, I found that I had to tease out for my students what does ‘described’ or ‘explained’ mean ...or what does ‘in depth’ or ‘breadth’ mean. I now realise that I needed to make sure that my colleagues were doing the same with their students ... I didn’t really start doing this right across the department until halfway through the year when I wondered why one class wasn’t doing as well. It was because they hadn’t really understood the terms. We are also aware of the need to utilise standards-based assessment in junior school to prepare the Year 11 students with the assessment marking and reporting systems.’

D2. Perceptions of the changes outlined in the Level 1 Geography Achievement Standards Review

In the 2003 round of interviews comments were sought regarding the changes being proposed to the geography achievement standards, registered in December 2001. These changes had been proposed following the review process that took place after the first year of their use. The MoE and the NZQA Secondary Education Assessment Group conducted the review and the proposed recommendations were sent out to schools and other stakeholders for consultation in March 2003. The changes included modifications to some of the geography achievement standard titles,

some of the achievement criteria, and also to some of the explanatory notes that help clarify the standards.

The interviewees were all positive about the proposed changes. Common descriptors included: sensible, user friendly, clearer titles, discrepancies removed, better consistency between the standards and ambiguous parts of the explanatory notes have been made clearer.

Three of the interviewees, however, indicated they would still like additional support regarding the use the Maori Concepts and the Perspectives referred to in the explanatory notes. They recommended that specific examples of Maori Concepts and the Perspectives should be included in the Level 1 resource and exemplar materials found on the TKI and NZQA websites.

Section E. Impressions of the Level 1 2002 examination papers

E1. General Perceptions

During the 2003 round of interviews, impressions of the Level 1 2002 externally examined geography achievement standard papers were sought. Interviewee feedback was generally very positive, apart from one exception, referred to later on. The teachers felt that the papers provided no real surprises, being similar in many ways to previous School Certificate Geography examinations. They considered the time allowance of three hours for completing the four external papers was generous, and that the standard of skills covered and content being assessed was fair. Their major issue was with the disappointing results a high percentage of students received for (Geography 1.2) 'Examine population patterns, processes and issues'. This reflected the national trend, with 67% of candidates gaining 'Not Achieved' for the standard and only 1% gaining 'Achievement with Excellence'.

Karen's comments were typical

I was positive about the exam papers when I saw them, and most of the students were pretty positive coming out of the exam, I thought they were what we were expecting. I was happy with the level of difficulty and the students seemed to have plenty of time. My results however were very poor in 1.2 [Geography 1.2] in fact I had only one student in the class who passed that achievement standard ... looking at the results nationally they showed the same trend. I think it was how 1.2 was marked that made the difference.'

The other interviewees mirrored these comments. Janet expanded on what she perceived as the reason for the disappointing results for geography achievement standard 1.2.

'Well what seems to be coming through the Board of Geography Teachers is that the marking schedule for 1.2 was fundamentally different from the others ... so there needs to be some kind of standardisation in the overall judgements [sufficiency statements]. Students should know if they write essays in a similar format right through the papers they should be able to meet the requirements for merits and excellences.'

The interviewees thought three hours gave all students plenty of time to finish. They commented that although many students had completed the papers and left after approximately two hours, the more academically inclined students tended to stay for the full three hours writing more comprehensive answers enabling Merit and Excellence grades to be gained. They felt the additional time allowance also suited students who were slower writers.

E2. Did grades reflect student ability?

The interviewees thought the grades achieved by the students, apart from Geography 1.2, fairly reflected their abilities. Jim, Janet, Paul and Henry all stated that the students they expected to get a Merit or an Excellence did, just as those students they expected to get a Not Achieved performed accordingly. Paul also admitted that more of his students got Merits than he expected.

However in comparing the geography results for the external assessments with other subjects at the national level, there was a feeling expressed by the interviewees that it appeared harder to achieve an Excellence in Year 11 geography than in many other subjects. Karen cited the statistic of only 3.5% of geography candidates gaining Excellence in the external papers compared with 18.75% of the history candidates. The concern of the interviewees being that if an Excellence grade in geography was too hard to achieve, then geography would likely suffer as a subject i.e. students would be less likely to take geography in Year 12.

E3. Student attitude towards externals and results

Apart from being disappointed with results gained in Geography 1.2, it was reported that the students were happy with their exam results. Henry, Paul, Janet and Jim indicated that there were very few complaints. Henry added that his students were also positive about their internal results.

Karen indicated that her students had mixed reactions regarding their achievements.

‘A number of students surprised themselves in how well they had done in the exams and have decided to come back and pick up geography at Level 2, but other students could not read their results at all and they didn’t have a clue what they had passed.’

E4. Credit accumulation

Both Henry and Karen indicated that many of their students were quick to work out the number of credits they needed in the external exams to accumulate the eighty credits required to gain the Level 1 NCEA qualification.

Henry explained

‘The students have become quite manipulative I reckon and have worked the system out bloody quickly. I know of kids who went into the exam having calculated exactly how many standards they needed to get to eighty credits ... so they did only the two geography standards needed and walked out of the exam after an hour. We thought they would strive for merit or excellence but talking to other teachers, they’re saying there’s less motivation to sit the exams because they [the students] realise they only need a small number of credits.’

Karen reported a similar situation applied to many of her students.

‘Our students do six subjects and have the chance to accrue a lot of credits. Some of them may have sixty or seventy credits internally and think “Oh, I only need fifteen or twenty credits in total. I’m sitting on eleven credits in geography ... why should I work ... I only need to pass one external out of the four ... and then I can say I’ve passed geography.” They haven’t actually got the motivation to do this end of year exam. I’ve tried to put some pressure on such students to attempt all of the standards, but they’ve said “I’m going to do this one or I’ll do that one” ... and they’ll pick and choose regardless. They only want to do the minimum and ask “what do I need to do to get an achieved ... do I have to write the paragraphs?” I’ve also got six or seven students who work very hard and are well motivated.’

The above scenario did not apply equally to all schools or at all schools. Paul indicated that in his class

‘At the moment, first time around, the kids all seem to be targeting the excellence and merit, which is good. They have responded pretty well. There have been very few people settling for just an achieved.’

E5. Implications of grades achieved for teaching?

The interviewees believed the grades achieved in 2002 meant that more of the less academically orientated geography students were taking Year 12 Geography in 2003. They felt this was partly due to the standard for the achievement grade philosophy for Level 1 NCEA externals being set at a slightly lower level than previously required to pass School Certificate.

Karen was finding that

'A number of students who made it [i.e. achieved at Level 1] can't cope with the Year 12 course work, apart from the skills and ideas Achievement Standard 2.4'.

Janet was experiencing a similar situation

'Some who achieved are finding Yr12 a bigger hurdle, with more in depth and higher level of thinking ... it's setting some kids up for failure in Yr 12 ... I'd like a stricter entry level but this could lead to a drop off in geography numbers'.

Henry and Paul both set minimum Level 1 geography credit levels for entry into their Year 12 programmes. Henry was using a rough guide of 14 to 15 credits to enter Year 12 geography while Paul set his cut off for entry at 15 credits.

Paul found that even using a tough credit entry level into Year 12 was not completely overcoming the problem.

'Even using a tough cut off at 15 credits and HOD discretion, I'm finding fewer geographers are repeating Yr 11 resulting in a longer tail in Yr 12 than before.'

They felt further consideration into what constitutes a fair and reasonable entry level into Year 12 geography still needs more discussion and experience.

Section F. Changes to Year 11 geography learning and assessment programmes

The findings under this heading are reported in two sections. The first section refers to changes made in 2002, the initial year of NCEA implementation. The second section deals with changes made in 2003 in the form of fine-tuning and lessons learnt from the 2002 implementation experience.

F1. Changes made to learning and assessment programmes in 2002

Key changes referred to by the interviewees in 2002 involved:

- a. Reallocation of time spent on the prescribed common topics (PCTs) and school selected studies (SSS).
- b. Increased use of formative assessment.
- c. Changed systems for recording and reporting assessment results.

a) Reallocation of time spent on the prescribed common topics (PCTs) and school selected studies (SSS)

In preparing students for School Certificate Geography up until 2001, geography teachers tended to spend approximately two thirds of their time covering the three Prescribed Common Topics. Under NCEA however, the combined credit allocation given to the PCT related achievement standards totalled only 9 out of the 24 credits on offer (NB under unit standards the combined credit allocation for the PCTs totals 12 out of the 24 credits on offer). Although the above NCEA achievement standard credit weightings closely reflect the intent of the geography syllabus, in reality these weightings were not being reflected in either geography programme emphasis or in topic time allocations. In other words, the PCTs were unfairly dominating the balance of geography course work. The change in the NCEA credit weightings brought about a reduction in time spent on the PCTs in the schools surveyed and an increase in time given to the externally assessed skills and ideas standard (Geography 1.4) and the internally assessed SSS. The following two selected quotes are representative of the shifts in geography programme emphasis and time allocations, as mentioned by the interviewees, following the implementation of Level 1 NCEA geography in 2002.

Henry emphasised

'We've spent more time on the non-PCT topics [School Selected Studies]. We've actually put in a specific skills module relating to AS 1.4 at the start of the year concentrating on basic skills as map drawing and graphing, and I have developed a sort of skills-based assessment system to help measure student progress. We have also given more recognition to global studies [Geography1.7] research [Geography1.5] and geographical issues [Geography1.6] rather than just tagging them onto the end.'

Or as succinctly put by Janet

'One of the big things we did was cut down on the extra time spent on teaching the PCTs.'

b) Increased use of formative assessment

The increased use of formative assessment was referred to by all of the interviewees.

Ruth for example stated

“I think we have used much more formative assessment at Year 11 than we have traditionally done ... we have made more use of group based activities and given specific feedback and feed-forward prior to the students doing their internal summative assessments.”

Janet elaborated further on how she encouraged the use of feed-forward and self-reflection.

‘We have used the extra time [from cutting back on the PCTs] for making sure the kids do good formative assessment stuff on the non PCTs. For example we would do a formative global study [Geography1.6] and then I would ask ‘Why didn’t you do so well as her?’ “What else do we need to understand?” ... We have also spent time teaching the kids how to write good geographic essays, because that’s one of our skills we haven’t done that well in, in the past.’

Henry noted his students’ response to formative assessment.

‘We’ve had more formative testing. The students have been receptive to this positive approach ... assessing during not just at end of a unit. The students also like tracking their own progress.’

c) Changed systems for recording and reporting assessment results

The interviewees reported that changes to both their recording and reporting practices coincided with the implementation of Level 1 NCEA. They all indicated that their recording and reporting systems had become both more formalised and aligned to school-wide policies. Handling of departmental procedures for recording and reporting student results was now being overseen by school appointed ‘assessment co-ordinators’ and invariably involved the use of commercial software packages such as ‘classroom manager’. The geography students were required to verify that their teachers had entered their results correctly, and use record sheets to track their own progress. Several of the interviewees felt they were becoming more proactive in retaining and filing student work, and alert to authenticity issues. Reporting had become outcomes based, with no reference to marks or percentages and most cases electronically produced.

Karen stated

‘We have completely changed our reporting system. We use ‘Not Yet Assessed’ for the achievement standards we are still to teach, and Not Achieved, Achieved with Merit or Achieved with Excellence for each standard completed.’

Paul commented

'The recording of results has become easier because the school has set up the whole structure for us to manage the handling of NCEA results.'

Janet's perspective differed from Paul's

'It is a bit scary ... yeah ... knowing you have to follow the procedures correctly, and there is a lot more pressure ... like getting the kids to sign all their grades ... all of these things take time. Before we just kept our grades and sent them off at the end of the year. Now the pressure is constant, we have to make sure we are continually meeting obligations to our assessment co-ordinator ... and if we haven't she is on your back ... you know.'

Karen noted a benefit of the detailed record keeping procedures for her was that

'They have helped me give more guidance to students about which standards to enter for.'

F2 Changes made to learning and assessment programmes in 2003

By the end of 2002 the interviewees realised that NCEA related assessment practices had played a dominant role in the delivery of their programmes.

Karen's view, expressed towards the end of 2002, is typical of this realisation.

'I'm concerned about the amount of marking. I've effectively marked eight geography assignments this year ... I wouldn't have done that much in the past with the internal component of School Certificate Geography ... I think it represents a huge increase in staff workload. I worry that what we are doing is actually taking us away from what we should be doing, which is actually helping students to learn ... we're focusing too much on assessments rather than teaching students.'

The interviewees indicated several changes they intended to make in 2003 to address the concerns expressed above. The suggested changes were aimed at reducing the over emphasis on assessment, placing the focus back more on classroom teaching and learning, and managing NCEA workloads more efficiently.

To try and achieve the aims above the case study schools experimented with a variety of strategies. These included:

- a. Reducing credits on offer.

- b. Limiting or eliminating formal formative practice tests and reassessment opportunities for the internal standards.
- c. Utilising resubmission rather than reassessment where appropriate.
- d. Using more informal formative assessment.
- e. Making internal assessment activities more school specific.
- f. Swapping the order of assessments.
- g. Experimenting with mixing and matching social science achievement standards.

a) Reducing credits on offer

While Jim, Henry and Paul continued to offer all 24 geography achievement standard credits in 2003, Karen, Janet and Ruth reduced the number of credits they were offering by 3 down to 21 credits. In each case this was achieved by culling one of the externally assessed PCT achievement standards.

Karen explained what this involved in her school

'We are not offering achievement standard 1.3 examine resource use in a farming or mining context for credit... we flicked this one as the students didn't like learning about horticulture and gold mining and a number opted not to sit it ... we are still going to cover the content but only very briefly, we won't be getting the kids to enter for this one.'

Karen further reasoned

'The students all have to do six subjects at our school and they're doing 24 credits in each subject, 144 credits. Why are we forcing them to do so much? I mean you only need 80 credits. I know in the past we've all stuck to the PCTs and not given enough time to the school selected studies. However, having spent more time on the internal achievement standards, I was really pushed to finish stuff for the external exam in 2002. With this change hopefully we're going to give ourselves more time to do things.'

Ruth's choice was similar to Karen's

'We have taken out the assessment for resource use in a farming or mining context PCT [Geography 1.3]. The school has a policy of reducing the number of credits offered by each subject ... farming and mining did not excite our clientele so that's what we've removed. We will still teach particular elements of the topic but have incorporated it into part of our skills based unit.'

Janet's selection was different

"We are not offering population studies [Geography 1.2] as an external. We are still going to look generally at some skills and general knowledge about population in Monsoon Asia and in New Zealand but are dealing specifically only with issues'.

b) Limiting or eliminating the formal practice tests and reassessment opportunities for the internal achievement standards.

A time saving management strategy adopted by the majority of interviewees in 2003 was to cut back and / or eliminate the more formal formative practice assessment tests and the summative reassessment opportunities for the internal standards. Both of which were widely practiced in 2002.

Janet best summarised this trend

'To help reduce the assessment work load we are offering only one summative assessment for the global and research achievement standards [in 2003] and not making use of formal assessments practice tests for the internals'

Janet provided additional reasoning for eliminating the use of formal, formative practice assessments.

'We have found that the students do not take the formative practice assessments seriously ... students ask "Is this the one that counts?" and if we tell them it isn't they don't put in any serious effort into giving it their best shot which is unfortunate and time wasting. We are instead putting more emphasis on less formal formative learning tasks and providing feed forward'.

Paul, like Janet, has eliminated the use of practice assessment activities for internal assessment and offered only one summative assessment for the research AS 1.5. He uses resubmission through conferencing for students close to achieving. Reassessment is available, but only for all students who have not achieved. Additional classroom based summative assessment opportunities have been reduced. As Paul explained

'Reassessment is only available for those who "did not achieve" and have requested another opportunity. The reassessment opportunity for these students is conducted outside of class time in the learning support centre.'

Paul indicated that this is not without difficulties

'It is not easy to have tasks of equivalent degree of difficulty for reassessment, and administering them to kids who are strugglers puts extra pressure on them and adds to our workload in terms of preparation and marking. It is not easy fitting the resit opportunities in, although the learning support centre has been pretty accommodating. Some of the people who failed the first time around have done better than the achieved grade the second time around which also raises concerns about fairness'.

c) Utilising resubmission rather than reassessment where appropriate

Resubmission was only introduced in the NCEA Update Issue 11, May 2002. This caused some controversy since it was part way through the year. By 2003 the survey schools were opting for resubmission for the students who gained a 'non-achieved grade' yet were close to achieving the internal standard being assessed.

As Paul indicated

'Resubmission is used just for students close to achieving. We do it by conferencing before going over the schedule with the classes.'

The use of resubmission in 2003 helped to reduce the need for the practice of offering reassessment opportunities.

d) Using more informal formative assessment

The role and purpose of formative assessment, as hinted at above, has been used differently by a number of the surveyed schools in 2003 compared with 2002. Four of the six interviewees were making less use of formal formative assessment practice tests and feedback to prepare students for their internal summative assessments. Instead they were making more use of daily classroom informal learning activities, to prepare and monitor student progress, and give feed-forward.

Ruth in 2003 stated

'Rather than do 50 minutes tests and give feedback I prefer to make more use of formative teaching activities. Teaching skills and getting the students together to try and work out how to handle questions ... discussing what they could do to create an excellent answer and to work out what makes an answer excellent.'

Likewise Janet indicated she was

'Improving formative assessment by going through different types of questions in class and looking at and discussing different model answers and providing feed forward and encouraging self reflection skills.'

As Henry indicates below, formal formative assessment still has a place for preparing students for the externally assessed prescribed common topics.

'We're still using formative assessment as pre tests for the PCTs'

e) Making internal assessment activities more school specific

Interviewees in 2003 indicated a movement away from reliance on the use of the web based internal assessment activities and a shift towards designing more school specific assessment activities and schedules as indicated by the selected quotes below.

Henry stated

'Our internal summative assessments are now all school based.'

Ruth elaborated

'I am not using any of the exemplar activities ... I have changed the issues and global activities to make them more interesting'.

Paul's perspective was similar

'We were disappointed with the invalid activities on TKI and NZQA and designed new ones for AS1.7 [Examine a global geographic topic] and AS1.5 [Carry out and present directed geographic research] and modified AS1.6 [Examine a contemporary geographic issue and evaluate the consequences] including new names and places.'

Three of the interviewees also indicated they were trying to make their assessment activities more targeted and manageable for both students and staff.

As Paul stated

'Big projects involving large numbers of student hours beyond the classroom, and hours of staff marking is just not viable ... we are trying to keep the assessments, short, targeted, focussed and manageable for us and the kids ... I think we have become better at this year than last year.'

Janet also found she was being

'More stringent when completing things and sticking to programme planned.'

f) Swapping the order and timing of assessments

Both Ruth and Karen indicated they were going to assess Geography 1.5 much later in the year compared with 2002.

As summarised by Karen

'One of the modifications we have made is swapping our internal assessment order around. Like we did [Geography] AS 1.5 Inquiry first in 2002 but this year but we're going to do it last. I can see if they do it later, they would probably do it better as they will have had more time to master the large number of skills required. We also intend offering reassessment for [Geography] AS 1.6 and [Geography] AS 1.7 in exam situations to save on class time and reduce extra work on staff.'

Paul indicated he was going to incorporate the assessment of Geography AS1.5 into fieldwork.

g) Experimenting with mixing and matching social science achievement standards

In 2003 Karen experimented with a Year 11 class offering a mix of achievement standards taken from both geography and history. It was primarily aimed at catering for the less academic learners.

Karen stated

'I created a new Social Science class at Level 1, with a mix of mix of geography and history standards, offering only one external achievement standard "Applying skills and ideas with direction in a geographic context" [Geography1.4].

She outlined two flow-on advantages that resulted

'This new social science class was not only more appropriate for the needs of the less academic learners ... it also enabled my Year 11 geography class to move at a better pace and with fewer behaviour interruptions.'

Janet also discussed the idea of mixing and matching achievement standards from different subjects including geography to create a new course. This class however was more likely to be offered at Level 2 and have an emphasis on sustainability. Another option discussed by two interviewees, but not implemented in 2003, was using the equivalent internally assessed

geography unit standards for the PCT topics geography AS 1.2 and AS 1.3 instead of offering the achievement standards for assessment in the external exams. Their perceived advantages in doing this included:

- The PCT could be assessed internally using only one setting (e.g. New Zealand or Monsoon Asia Population) thus saving teaching time.
- Students could still gain credit, 4 credits for the PCT related unit standards as opposed to only 3 for NCEA equivalents.
- It would allow the very good students more time in the external examinations to excel by writing more detailed / comprehensive answers as needed for merit and excellence.

This indicated that teachers were thinking very strategically about how to offer and present the content in terms of ‘packaging’ the assessment for the best possible outcomes

G. Confidence Levels

The findings regarding the interviewees’ confidence levels are discussed separately for 2002 and 2003, and in regards to the implementation of NCEA at the Year 12 level.

G1 Teachers’ confidence levels toward the end of 2002

Towards the end of 2002 the interviewees felt they had been reasonably successful in implementing Level 1 NCEA geography, although they were waiting for the grades from the externally assessed achievement standards to come out before acknowledging complete success. They expressed increased confidence in aspects of achievement standards-based assessment that they had found challenging at the start of the year, such as planning Level 1 assessment programmes and designing their own assessment activities and related schedules. They felt they were far wiser from having had a full years NCEA implementation experience and were proposing exciting ideas regarding ways learning and assessment in geography could be managed more effectively in 2003. To avoid repetition these will be dealt with in the section G2 regarding programme changes made in 2003. They also acknowledged that different challenges had emerged along the journey during 2002 such as developing expertise in applying the assessment schedules to student work and making the final judgement calls.

The following quotes are indicative of these changes in confidence levels experienced during the first year of implementation.

Jim's journey

'I feel reasonably confident about it [NCEA] all now. It has been a busy year in terms of getting everything done ... I struggled to start off ... but its definitely got easier as the year's gone on.'

Ruth's journey

'I think our first steps have been pretty good. I feel confident about designing activities at Level 1 and we're okay with the implementation procedures. Our Year 9 and 10 classes have also been skilled in coping with standards-based assessment ... I think that is a positive thing. I feel I need more work on making judgements about student work ... going into Level 2 my main concern will be with the marking schedules, to ensure the standard is higher than Level 1.'

Karen expressed similar sentiments to Ruth

'I feel quiet confident about programme planning and writing the assessments, but am less confident about my marking, especially after the feedback I got from the moderation process.'

Paul, while expressing an overall level of confidence, concurred with the others in terms of making the judgement calls.

'I think we are still learning about putting the grade boundaries in place, between not achieved, achieved and so on. We need to mark a little more tightly than we've done in the past, and constantly refer to the evidence and judgement statements.'

G2 Teacher's confidence levels towards the end of 2003

All of the interviewees were expressing increased confidence levels regarding the implementation of NCEA Level 1 geography having had the benefit of more than one year's experience. They expressed increased confidence in understanding how the systems work, and improved familiarity with the achievement standards. They felt more comfortable with making judgements and recognising the standards, and concerns regarding resubmission and reassessment were waning. The interviewees also felt timing and related workloads were being managed more efficiently by doing less better and not feeling pressured to offer the maximum credits at each level. The following quotations below help capture these themes.

In terms of experience and familiarity with NCEA Henry indicated

'Staff who taught Year 11 geography last year are more confident than those doing it for the first time this year.'

Or as expressed by Paul

'One teacher who did not teach Level 1 last year is still not comfortable but is coming to grips with the standard.'

Karen indicated

'I'm more confident and secure now I know how the system works, and feel better prepared for levels 2 and 3. Your confidence in the delivery of assessment is also portrayed to the students and I think they feel much more secure about what they are now getting and its relevance. My new staff member [in 2002] is also getting his head around NCEA and is for example now prepared to alter tasks on websites to better suit departmental needs.'

Janet stated she now had

'Few concerns at Year 11 ... was confident in judgement making at level 1 and was prepared to use more p.j. [professional judgement] in assessing student work ... getting a big tick from the moderator also helped boost confidence.'

Likewise Ruth expressed

'Improved confidence in judgement making ... getting a good feel for the different grade levels ... recognising what achievement criteria students work met.'

Karen felt her initial concerns regarding huge reassessment workloads were easing

'I've had a few student resubmissions for minor omissions, but found most students who do poorly are not really interested in reassessment opportunities.'

Paul also felt more confident with the organization and management of NCEA workloads in 2003

'Our timing of assessment is better organised ... the assessments activities are shorter, more targeted, and manageable ... we have cut down on the size of research activity so it is better suited for kids and staff ... we only have reassessment opportunities for those who do not achieve. We are better at it this year and feel more comfortable with it.'

Ruth found that reducing the number of credits offered had provided her with more breathing space and an increased confidence to manage the NCEA workload.

'Not offering AS1.3, and placing less emphasis on the other PCTs has made my workload more manageable. I have more flexibility and more time for revision. I may even reintroduce some of the fieldwork that got cut last year, although of a less time consuming variety.'

The interviewees however still remained uneasy about the use of eighteen Maori concepts associated with the achievement standards. Karen, for example, indicated that she was relieved they were not assessed in the Level 1 2002 geography external exams. Three of the interviewees expressed a hope that when Maori concepts were assessed in the external exams, that the students would either be able to select which of the concept(s) they were going to use in their answers or alternatively that the assessor would give an indication of which concept(s) were to be assessed in the geography exam specifications.

G3 Confidence levels regarding implementation of NCEA at Year 12?

The teachers were unanimous that the experiences gained in implementing NCEA at Year 11 helped to make the transition towards implementing NCEA at Year 12 in 2003 easier.

Familiarity with NCEA related systems, confidence in assessment design, better understanding of the achievement standards, importance of working with teachers from other schools and not getting hung up on the need for formal formative assessment and reassessment opportunities were frequently mentioned. The selected quotations below provide an insight into the teachers' confidence levels.

Janet found setting up NCEA at Year 12 easier for several reasons.

'Systems were already in place so we knew the kind of hoops we were to go through. We were more confident in assessment design and understood where the standard at Level 1 was set. We've learnt how to manage time more efficiently by limiting number of assessments opportunities offered. We are also doing our planning with two other schools.'

Jim concurred

'You are better prepared as you know the procedures and the Year 12 students are familiar with the systems too. In terms of assessment practices I can transfer these skills straight across. It has helped having planning days with teachers from 2 other schools. I am also more aware of the need to finish everything on time.'

Ruth reinforced these ideas, stating

'You are more confident that you are on the right track'

Both Henry and Paul reinforced the benefits of having larger departments. Paul for example summarised the following benefits.

‘Some staff were able to review level 1 while others concentrated on implementing Level 2 ... and ... school moderation is not such a problem having four staff to swap sample activities and schedules around.’

Although the interviewees, in general, felt more confident regarding implementing Level 2 NCEA, they still expressed some areas of concern. Having not had external exams at this level for some considerable time they were justifiably concerned about the likely format of the external papers. This concern was not helped by the late arrival of the Level 2 exemplars on the NZQA website.

They were of the opinion that Level 2 represented a big step up from Level 1 in terms of the depth of knowledge and levels of geographic skills and ideas required. Karen and Janet in particular felt the exemplars on TKI and the Auckland Geography Teachers’ Association Level 2 CD Rom, while containing good ideas, had not progressed much from where the Level 1 standard had been set. This led them to question the setting of the so-called ‘National Standard’.

A parallel drawn with Level 1 was the need to considerably cut back on the time spent on the coverage of the PCTs at Level 2. There was also a concern expressed by Henry, that under NCEA there was going to be a loss of the flexibility to pursue students’ interests in Year 12 compared with when it was fully internally assessed.

Summary of findings

The introduction of the new NCEA qualification at Level 1 in 2002 involved a marked shift in the assessment approach used by each of the six case study geography departments. Although each department successfully managed to implement NCEA geography at Level 1 by the end of the first year, many challenges were encountered. While some challenges were department specific others, for example the provision of faulty website exemplar materials, impacted on all of the departments. With the hindsight of one year’s NCEA experience, all of the interviewees realised that ongoing review and refinement was necessary in order to make Level 1 NCEA assessment more manageable and less dominating in programme delivery. As a result in 2003 the case study schools were very strategic in how they repackaged their Level 1 NCEA related assessment programmes in order to achieve the best possible outcome for both the geography

staff and students. The interviewees were also unanimous that the experience gained in implementing NCEA at year 11 in 2002-3 was going to help make the transition towards implementing NCEA at the other senior levels much easier.

It was found that the implementation challenges and needs of the six case study schools were not always identical nor were their choices selected for managing the implementation process during 2002-3. For example, factors such as departmental size and level of staff teaching experience, including familiarity and use of other forms of standards based assessment influenced the implementation process. Although no one single implementation strategy necessarily applied uniformly to all of the geography departments common trends especially between like department types emerged. These trends are discussed more fully in the next chapter.

Figures 1 and 2 at the end of this chapter are used to help summarise the key research findings, regarding the Level 1 NCEA implementation process during 2002 and 2003. Figure 1 provides a summary of the Level 1 NCEA geography implementation findings for 2002. The key focus for the six case study geography departments at this time involved making the paradigm shift from norm-referenced assessment to achievement-based assessment. The diagram identifies the challenges perceived, the factors found valuable in assisting implementation, the obstacles found hindering implementation, changes resulting to the learning and assessment programmes and snapshots during the year regarding teacher confidence levels in relation to NCEA. Figure 2 applies to 2003 and uses the same template headings for comparative purposes. The key focus for the second year of implementation involved both review and fine-tuning. The emphasis being on managing the NCEA geography workload more efficiently and addressing the dominant role achievement-based assessment was perceived as having on classroom teaching and learning during the first year of implementation.

Not included in either summary diagrams is the section on the interviewees' perceptions of the Level 1 2002 external examination papers. Their impressions were generally positive regarding the timing, degree of difficulty, format and familiarity of the tasks set. The one exception was the disappointing results received for Geography AS 1.2 where 67% of the students nationally did not achieve. Apart from the Geography AS 1.2 results, the interviewees thought the grades students achieved fairly reflected their ability.

A different concern however was expressed in relation to credit accumulation. The process whereby students are quick to work out the number of credits they need in the external exams to

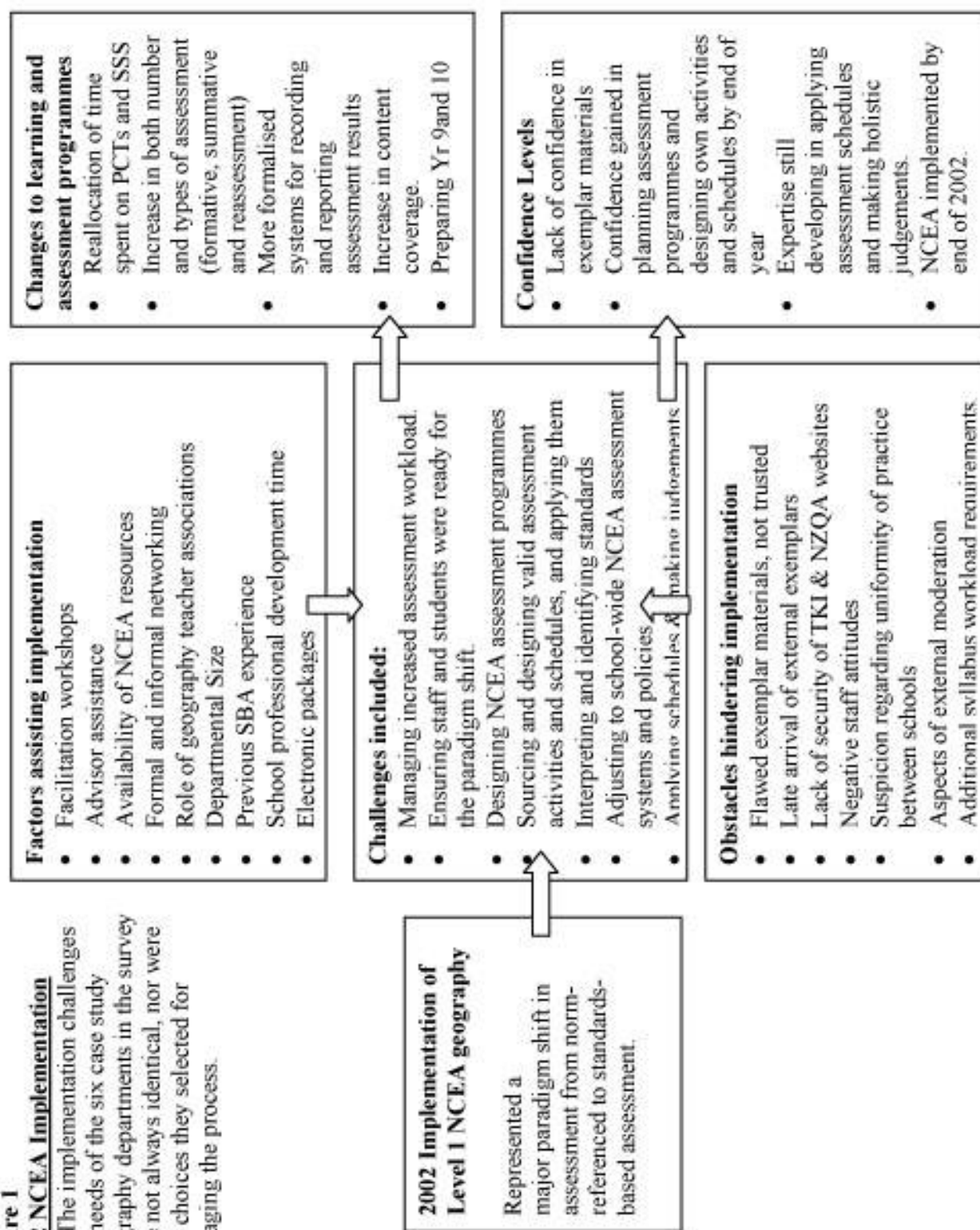
gain the Level 1 NCEA qualification, and then are selective regarding which paper(s) they will actually attempt. This was identified by several of the interviewees, at the end of 2002, to be a downside or less motivating aspect of NCEA.

Strong parallels exist between the interviewees' perceptions of the NCEA implementation process as summarised in Figure 1 and feedback received from a questionnaire titled 'Implementation of the Level 1 Geography Achievement Standards' (Appendix 7) posted to schools with the NZBoGT's Geography Teacher Exam Survey in February 2003. The geography teachers responding to this questionnaire indicated they found the most challenging aspect of implementing NCEA related assessment changes in 2002 was the time and workload involved. The three most valuable NCEA support systems were reported as the training days, networking with others, plus the exemplar activities available on the MoE and NZQA websites and the AGTA and NZBoGT CD Roms. The main obstacles reported as hindering the implementation process included: faulty exemplar materials, erratic performance by external moderators, the need for a trial, uncertainty in interpreting the achievement standards and the rushed nature of the implementation timeline. Changes signalled as intentions to make to their 2003 geography teaching programmes included reworking internal assessment activities so they were more user friendly, reducing the number of assessment opportunities offered, and not offering Achievement Standard 1.2. The type of assistance respondents considered would be beneficial for 2003 included access to valid assessment activities, professional development time, and opportunities for cluster group meetings with other schools.

Figure 1

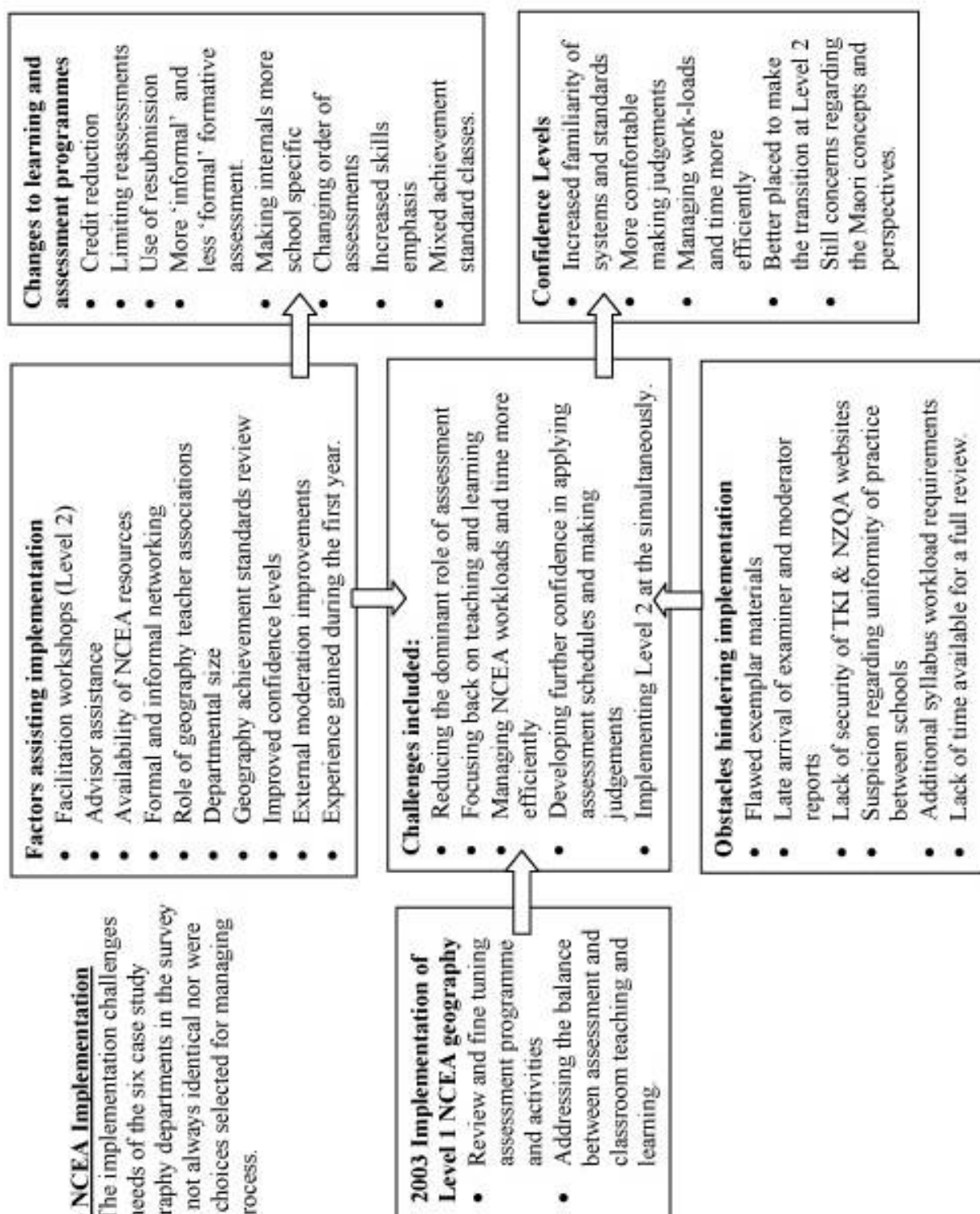
2002 NCEA Implementation

NB The implementation challenges and needs of the six case study geography departments in the survey were not always identical, nor were their choices they selected for managing the process.



2003 NCEA Implementation

NB The implementation challenges and needs of the six case study geography departments in the survey were not always identical nor were their choices selected for managing the process.



Chapter 4 Discussion of the Findings

In this section the findings and emerging themes are summarised, and insights and implications discussed. The implementation of Level 1 NCEA geography for the six departments surveyed, as illustrated by the summary diagrams at the end of Chapter 3, can be viewed as a two-stage process. The first stage prior to and during 2002 involved making the paradigm shift to standards-based assessment and in many respects was akin to a trial. The focus of the six departments during this stage was perceived simply as getting Level 1 NCEA geography up and running, an objective that they all managed to achieve, but in a format they came to recognise by the end of the year as being unsustainable long term in regards to teacher workloads and excessive use of assessment. The second stage commencing in 2003, involved modifying NCEA related assessment practice in light of the 2002 experience. The focus at this stage was to make NCEA assessment more manageable in terms of workload and less dominating in relation to classroom teaching and learning.

Stage One

Increased Workload

During the first stage, managing a significant increase in teacher workload was reported by all the interviewees as a major challenge. They openly acknowledged this increase in workload was an expected consequence of NCEA for them, at least in the initial implementation phases. Indeed, as Alison (2005) *Teachers talk about NCEA* research findings have made clear, all teachers were required to put a lot of extra effort into making NCEA work, and that most found managing the transition process to be challenging intellectually, emotionally and physically. It would be fair to say however, that the geography interviewees did not fully anticipate the extent of the actual workload required due to a number of unforeseen contributing factors to be discussed.

For the interviewees, the key generators of the increased workload in the lead up time and during 2002 included sourcing and designing sufficient valid assessment activities and schedules, planning and administering their NCEA related assessment programmes, interpreting the achievement standards, identifying the 'national standard', applying the assessment schedules, ensuring staff and students were adequately prepared for making the paradigm shift to standards-based assessment and adjusting to school wide NCEA assessment systems including internal and external moderation. While the above list of workload generators can be viewed as generic in

nature (i.e. likely to be applicable to most subject areas), the geography interviewees perceived three factors in particular that contributed significantly to their workloads.

Lack of high quality exemplars

The first factor was the lack of high quality geography assessment exemplar materials available on the TKI website as promised by the Ministry of Education. The PPTA paper *The NCEA result: not yet achieved* (2002) recognised and made specific mention of the MoE's substandard internal assessment exemplars occurring in geography as well as in accounting, music, science and technology. The interviewees expressed real concerns regarding the variable quality and often flawed nature of the geography exemplars posted on the TKI website. They expressed feelings of anxiety and frustration created by the extra workload that resulted including a loss of confidence in the overall NCEA implementation process.

Nature of the geography achievement standards

The second factor relates to the nature of the geography achievement standards themselves. Although based on the existing syllabus documentation, the Level 1 geography achievement standards incorporated a number of changes and additions, made by the writers in an attempt to update the syllabus via the backdoor. While, the ERO (2004) publication reported that the majority of subject areas surveyed reported the implementation of NCEA as requiring minimal if any changes to be made to the curriculum, this did not appear to be the case in geography. The interviewees intimated that the geography achievement standards added to the already overcrowded geography Level 1 teaching programmes, requiring additional content coverage, additional perspectives, new terminology, and nineteen Maori concepts to be incorporated. In terms of interpreting the achievement standards, the interviewees initially found understanding the terminology used in the achievement criteria and apparent ambiguities within the special notes to be challenging. In the second round of interviews it should be noted that the teachers were positive about the changes proposed for the version two Level 1 geography achievement standards, which they perceived to be more user friendly in nature with clearer explanatory notes.

Assessment programmes

The third contributing factor was a perceived need for assessment programmes to have available tasks and schedules for formal formative, summative and reassessment purposes for each of the internally assessed geography achievement standards (apart from the research standard Geography 1.5, where a reassessment opportunity was not always possible due to time

constraints). This notion disseminated to the interviewees during their 2001 NCEA Level 1 geography teacher workshops, impacted considerably on their assessment related workloads, in terms of both sourcing sufficient numbers of valid assessment activities and finding time to make all of these assessment opportunities available.

When combined with each of the four externally assessed achievement standards typically involving one formative end of unit type assessment and at least one formal revision type assessment, normally conducted in school practice examinations, meant geography assessment workloads loomed high. In this light of the above factors it is understandable why the interviewees perceived their NCEA related geography assessment programmes to be creating far greater workload pressures, not only for themselves but also for their students, than may have initially been anticipated.

Resubmission

This above situation was further compounded by a somewhat late indication made by NZQA in NCEA Update Issue 11, (May 2002) that resubmission was admissible and could be utilized rather than reassessment where opportunities were appropriate. Resubmission had not been considered as an available option in any of the interviewees' school assessment policy guidelines for 2002 and therefore was not able to be utilized in the place of reassessment in their geography department assessment programmes.

The above discussion on workloads indicates firstly the importance of having sound exemplar material for assessment programmes, if teacher confidence is to be maintained and workloads are to be kept manageable. Secondly, that assessment reform should not be used as a convenient avenue for updating and or expanding syllabus related content and concepts. Thirdly, it is important that any changes in assessment policies or procedures need to be signalled in a time framework that allows teachers to adapt their practice appropriately.

Departmental Differences

Workload aside, the implementation of Level 1 NCEA geography required a significant paradigm shift in the way learning is assessed for both staff and students. The related challenges involved in making this transition did not however apply uniformly across all six geography departments. Factors such as departmental size, level of staff teaching experience, including familiarity and use of other forms of standards based assessment were found to be important influencing factors. For example, the two larger geography departments surveyed with experienced staff, benefited from being able to delegate NCEA tasks, peer critique work and

engage in debates within their own ranks. Congruously, the geography staff in the small or sole person departments found the NCEA implementation process more onerous, with fewer people to share the workload or to discuss and clarify ideas with.

Similarly, the three departments surveyed with prior experience in the use of geography unit standards and grade related criteria, indicated that being familiar and confident with these forms of standards-based assessment, helped make the transition or paradigm shift to NCEA related assessment smoother. In contrast, the geography departments surveyed where staff had either resisted, or had no opportunities to utilise other forms of standards based assessment, found making the same transition to be more demanding. These findings are consistent with those outlined in the Education Review Office (2004) report. The interviewees also revealed that the geography staff that had resisted implementing geography unit standards tended, at least initially, to be less accepting in attitude towards implementing NCEA. Likewise, interviewees revealed that the Year 9 and 10 students who had prior experience of working with achievement-based style assessment felt more comfortable in making the transition than those who had not.

An awareness of departmental differences, as discussed above needs careful consideration when putting in place the professional development programmes for assessment reforms such as NCEA, as clearly one size does not necessarily fit all. As indicated previously, the implementation challenges and needs of the six case study geography departments were not always identical, and neither were the choices they selected for managing the process. Access to appropriate targeted support, to address specific individual department needs, such as access to a subject advisor, would help also help improve teacher understanding and confidence levels.

Professional Judgements and Recognising Standards

In comparison with previous assessment systems, NCEA relies on teachers making more professional judgements. The interviewees found making these judgements challenging, especially during the first year of implementation. For the interviewees this challenge appeared to operate at three different levels, these being within schools, between schools and at a national level. Within schools the challenge involved differentiating between the grade boundaries (Non Achievement, Achievement, Achievement with Merit and Achievement with Excellence) particularly making the border line call between each of the grades. Between schools there was anxiety as to whether the so-called national standard was being applied in a consistent manner. Interviewees expressed anxiety that their school, was maybe setting a higher standard than that set by a school down the road or providing more reassessment opportunities. At the national

level the interviewees experienced difficulty adjusting to marking at a seemingly lower standard, at the achievement level, than which they had become accustomed under the former School Certificate norm-referenced system. Interviewees also felt communication of the ‘national standard’ and the related concept of making ‘holistic judgements’, needed to be made more transparent during training workshops, in order to give them the self-confidence needed when designing and applying assessment schedules. It is important that geography teachers continue to share ideas on what they consider constitutes a common understanding of student attainment at each achievement grade level and also on ways to achieve consistency in making professional / holistic judgements.

School wide NCEA related systems.

The final challenge acknowledged by the interviewees during stage one was the need to adjust to the school-wide (as opposed to departmental) NCEA related assessment systems. They found they needed to be a lot more formalised and structured in the way they complied with NCEA policies and procedures, such as authenticity, lateness, internal moderation of assessments, verification of student results, reassessment opportunities and the like, than they had been previously. Getting the mechanics and logistics of such procedures set up, and ensuring all departmental members were compliant was perceived as the main challenge or adjustment needed to be made.

Support Systems

Facilitation Workshops

In addressing all of the challenges referred to above the interviewees identified several valuable support systems, as summarised in Figure 1 at the end of Chapter 3. The interviewees perceived the NCEA teacher training facilitation workshop days as being invaluable on two counts. The first was to provide a starting point for disseminating information on NCEA and achievement-standards based assessment. The second count, and one not to be underestimated, was that the workshops provided a valuable forum for geography teachers to have the opportunity to plan collaboratively, to chat, to raise lots of questions, to share ideas and to informally begin networking with other colleagues. This finding was also found by the research of Alison (2005) and by Hipkins, Conner and Neill (2005). The geography interviewees really valued engaging in professional dialogue and developing and sharing ideas and resources. Unfortunately opportunities were not always sufficiently long enough at the training days or readily available within geography departments meetings, due to time restrictions, for such dialogue to be as professionally productive as it could have been.

Networking

Professional dialogue and productivity arising from formal and informal networking between schools, where utilised, were also found to be professionally rewarding. Two of the interviewees, from the smaller schools, were part of a larger cluster of schools working collaboratively together to produce a practice exam package on CD Rom for Year 11 geography. They found having links beyond school, involving sharing and moderating each others work, helped improve their own assessment practice and level of expertise. The interviewee from the sole person geography department, who networked with two teachers from small rural schools, to jointly plan NCEA programmes and a shared field trip assessment, concurred. He was very positive regarding the spin offs gained through collaborative assessment planning, and gleaning ideas and wisdom from more experienced practitioners. The three other interviewees found networking in an informal manner with colleagues at other schools, either by phone or by email, to be desirable. They found it both beneficial and reassuring to check on how NCEA progress was being made at other schools, as well as discussing related ideas and concerns.

Regional Advisors

The interviewees from the smaller geography departments also valued having the regional social science advisor available to provide additional guidance and support. They appreciated having an outsider with subject expertise giving advice and feedback regarding the appropriateness of their assessment activities and programmes, as they were not always in a position to critique or internally moderate their own work.

The process of teachers from different schools working together collaboratively and participating in critical dialogue through facilitator workshops, association meetings, networking or utilising a subject advisor appears to have been an effective, although possibly under-utilised, measure in assisting the implementation of Level 1 NCEA geography. Indeed, Hargreaves (2003) has acknowledged the importance of such professional learning communities, whereby teachers within a school or across schools work together, share ideas and provide mutual support, as an important social process in bringing about effective change management in schools. The above discourse suggests that fostering professional communities whereby schools can work together collaboratively and share models of good practice needs to be encouraged.

Resource Materials

Having a range of NCEA geography resource materials available to assist implementation was also considered helpful by the interviewees. They felt both the MoE's TKI and the NZQA's NCEA websites provided useful reference points. However, genuine concerns were expressed about the variable quality and sufficiency of the resources provided on the TKI site. In addition several of the interviewees also purchased exemplar internal assessment activities provided by the AGTA, and exemplar external resources made available through the NZBoGT. While these resources did not always suit the departmental needs directly, particularly in regards to settings, having them available on either the Internet or on CD Rom made modifying them relatively easy.

The local Canterbury Geography Teachers' Association (CGTA) provided opportunities for the teachers to meet and discuss implementation of Level 1 NCEA, however some of the interviewees felt they could have been more proactive in making available assessment resources with a local or regional settings. This could have saved them the time taken to modify and tweak exemplars provided with a national or an Auckland focus. The CGTA did become more active in this regard in relation to NCEA levels two and three. The role of geography associations, at both the national and regional levels, played an important and complimentary role to that of the two central agencies (MoE and NZQA) in providing NCEA resource materials for the interviewees.

Skill of designing and modifying assessment materials

A positive spin-off, easily overlooked, resulting from the interviewees having a lack of confidence in the TKI exemplars and related security issues was that they became quite adept at modifying assessment activities, to better suit their needs, or designing their own. If the web exemplars had all been valid, the interviewees may have been tempted to rely solely on these for assessment purposes. A positive upshot however, despite the extra workload involved, was that by the end of the 2002 all of the interviewees expressed confidence in modifying and designing their own assessment activities and schedules. This skill, essential to the long-term implementation of NCEA, was recognised by the MoE, who provided all teachers with a generic professional development workshop in standards-based assessment task design and adaptation in Term 2 2003. Professional development, in addition to providing assessment exemplar material for use, should also focus on training teachers how to modify and design their own assessment materials.

While it is important for teachers to receive professional development in designing their own assessment resources, there is still remains an ongoing need for the TKI website. The function being to provide new and updated internal exemplars as guides, to demonstrate firstly changes resulting from Achievement Standard reviews and secondly to demonstrate innovative assessment practices coming on-stream as teacher confidence and expertise improves with the benefit of ongoing experience.

Availability of planning time

The interviewees repeatedly reported that finding sufficient time for implementing NCEA as an ongoing issue for their departments in the lead up time and during 2002. The smaller departments in particular found the implementation timelines rushed. They also found in 2003 they had to focus predominantly on implementing Level 2 NCEA geography, leaving them little or no time to review or consolidate the changes made at Level 1. The in-school professional development days provided during 2001 were highly valued in this regard, giving the geography departments' breathing space to help prepare. The provision of additional time requirements, especially for small or single person geography departments should be given due attention.

Other factors assisting implementation, already made reference to within this chapter, were the benefits gained from having all or some of the following: large departments, experienced geography staff and familiarity with previous forms of standards-based assessment.

Obstacles hindering implementation

Faulty exemplar materials

As well as factors assisting implementation the interviewees also referred to a number of obstacles hindering implementation. These are summarised in Figure 1 at the end of Chapter 3. Suspicion regarding uniformity of practice between schools, negative staff attitudes, additional syllabus workloads and flawed exemplar material has already been referred to within this discussion chapter. The availability of quality-assured internal assessment exemplars on the TKI website as promised by the MoE however does require further discussion. These exemplars were meant to reduce teacher workloads and assist teacher confidence levels leading into the implementation of NCEA. However, the appearance of variable quality and sometimes flawed geography exemplars appeared to have the reverse effect creating anxiety and frustration for the interviewees and considerably increasing their workloads.

Several reasons for the appearance of faulty exemplar materials have been referred to by the PPTA (2002) and ACT NZ (2002). One being that the geography internal exemplars placed on TKI and also used for Level 1 training, were based on the draft achievement standards and not the registered versions that had undergone further modifications. The registration unfortunately did not occur until 21 December 2001, long past the time the exemplar writers and teachers had prepared the bulk of their assessment materials. It was not however until June 2002 that teachers had it pointed out that several geography resources on the TKI website were in need of modification because of the variance above. Another reason suggested for the low quality of the exemplar material was that they were written by busy teachers, withdrawn from schools for a few days and asked to attempt the impossible. Regardless of the reasons, having exemplars on TKI that contained flaws that were later identified as not valid or valid only with modifications did not inspire confidence in the interviewees who had used or planned to use them, and led to a negative backlash, loss of faith in TKI and feelings of frustration and anxiety to be experienced. The availability of quality assured pre-moderated exemplars would have reduced the time teachers had to spend on sourcing new or modifying existing ones.

Another concern was the lack of security with exemplar material on both the TKI and NZQA websites. Interviewees gave examples of students accessing the activities and schedules on the websites creating issues of authenticity and fairness surrounding student work. This meant that the exemplars were not ideally suited for summative internal assessment purposes. Modifying these exemplars to address security and authenticity concerns added further to interviewee workloads. Although the purchase of the Auckland Level 1 CD Rom helped offset security issues, several activities needed modification to better suit the local Christchurch / Canterbury geographic related studies.

Late availability of external exemplars, examination schedules and examiner reports

Half of the interviewees expressed further frustration created by the late arrival (i.e. in Term 3) of the external exemplars on the NZQA NCEA website. They had hoped these exemplars would have been available early in the year for reference and guidance purposes, or at least half way through the year for possible use in mid year practice exams. They also wanted more than one exemplar to be provided for each standard, to use in mid and end of year practice exams.

Research by ERO (2004) and Alison (2005) expressed similar teacher concerns regarding the initial paucity of external exemplars, and insufficient guidance about what to expect resulting from the delays in their availability. To some extent the geographers concern regarding having more than one external exemplar was offset by the availability of the NZ BOGT Level 1 CD Rom containing sample external exemplars, or as mentioned earlier, schools forming cluster

groups to develop their own external exemplar packages. The need for ongoing Level 1 external exemplars is not such a high priority now that actual externally assessed examination papers are available for reference or use.

In 2003 the interviewees also expressed concern at the long delays in the availability of the 2002 examiners reports and schedules. These were not released until Term 3, too late to incorporate ideas and advice into topics already taught. The interviewees using the 2002 exam as the basis for their 2003 mid year practice exam also wanted access to the marking schedule for marking student scripts. The interviewees felt the examiners report should have been available by April at the latest in order to maximise teacher and learner benefits. NZQA needs to avoid delays in releasing critical information to teachers.

External Moderation

The final obstacle interviewees reported hindering implementation was in regard to external moderation. While one interviewee benefited from getting a big tick from their moderator others were not so happy on a number of counts. To begin with they expressed concerns during 2002 regarding long delay in receiving feedback, possibly due in part to NCEA stop work industrial action requested by PPTA. Secondly, they found the lack of feedback or explanation as to why an activity or schedule was invalid to be most unhelpful. Thirdly a lack of guidance provided on how to overcome moderation concerns was also perceived as unsatisfactory. While acknowledging that moderators needed time to learn their process, interviewees also raised concern about inconsistencies in moderator decision-making. Two interviewees were able to cite specific examples whereby schools had submitted identical work to different moderators but received markedly different decisions, bringing the credibility of the moderation system into question. ACT NZ (2002), ERO (2004) and Alison (2005) have all made similar comments about the external moderation system to those expressed above.

On a positive side during 2003 the interviewees did report that moderators were generally being more constructive with their comments, and were indicating why an assessment activity or schedule was invalid or how a judgement made in assessing student work may have erred. Towards the end of 2005 a draft moderation report template was circulated to schools for comment. Changes featured were greater room for commentary feedback and next steps to be given to the provider by the subject moderator. The external moderation process, particularly in the early stages of implementation, should assist teacher professional development through the provision of appropriate feedback and feed forward comments in relation to materials submitted.

Longer lead in time

In reviewing the obstacles identified by the interviewees as hindering NCEA implementation, many relate back to issues where the two central agencies MOE and NZQA appear to have fallen short in aspects of delivering change management. Examples include the timing issues regarding the use of resubmission, the late registration of the final versions of the geography Level 1 achievement standards, the delayed notification to the teachers about internal exemplar activities on TKI being invalid or in need of modification, the prolonged delay in the release of markers reports and external examination marking schedules, and the unhelpful nature of the initial external moderators' feedback. Although the implementation of NCEA was delayed by a year, benefits in a longer delay may have enabled the central agencies to get some of these initial teething problems identified above resolved. A longer lead in time would also have given schools more planning time.

A longer lead in time would have enabled a pilot scheme to trial NCEA before its introduction, as happened in geography with the introduction of grade related criteria achievement-based assessment at Year 12 in the late 1980s and with the implementation of Unit Standards in the mid 1990s. The advantage of these trials is that they allowed for flaws to be identified before the new assessment systems were introduced nation wide. For example, in the geography unit standard trials held at the start of 1995, it quickly became obvious that having students required to achieve the standard in both prescribed common topic settings was entirely unrealistic and modifications were promptly put in place. Similarly ambiguities teachers found in applying the unit standards were ironed out and the inconsistencies between the standards addressed prior to the teacher training and implementation phases, enhancing teacher confidence.

Other key advantages gained from the two geography assessment trials included:

- The availability of pre-moderated and watertight exemplar activities and schedules for use in teacher training.
- Actual student work for teachers to mark with clear benchmark examples of the standard combined with reasoned decision making and agreed judgements.
- The identification of teachers with expertise in terms of moderating and or writing activities to assist in the developing training materials and to help facilitate programme delivery.
- Realistic and tried exemplar long term plans, recording and reporting templates.
- The identification of the common pitfalls to avoid and the best practices to be followed.

In both the achievement-based assessment and unit standard trials all materials were given a final critique to ensure they represented current versions of the standards and best practice, before they were used in teachers training workshops. It could be argued that if a school trial for NCEA Level 1 Geography, modelled on the past assessment trials, had been approved by the Minister of Education and conducted prior to teacher training and full implementation, the initial loss of confidence in NCEA and increased teacher workloads as perceived by the geography interviewees, may have been preventable. The benefits of a trial should not be overlooked.

Changes to teaching and learning programmes

Syllabus Expansion

Although ERO (2004) indicated that the implementation of NCEA had not resulted in substantial changes to teaching practice and learning programmes, this was not this case in Level 1 geography. Reflecting back on the end of the first year of NCEA implementation the interviewees were able to identify a number of significant changes that had occurred to their geography learning and assessment programmes in relation to NCEA related assessment. All of the interviewees for instance indicated that the change in credit weightings to different course components, brought about by Level 1 geography achievement standards, had resulted in a considerable reduction in the amount of time they spent on the externally assessed prescribed common topics (PCTs) and an increase in time given to the internally assessed school selected studies (SSS). While representing a significant change for the interviewees it could be argued that this change was actually reinforcing existing syllabus requirements that teachers had strayed from due to the nature of the School Certificate Geography examinations over the last two decades. Other changes however, relating to additional content coverage, the uses of new terminology, plus the addition of a range of perspectives and new Maori concepts, as mentioned earlier in this chapter, were new requirements resulting from the geography achievement standards. Assessment reform should not be used to update and expand syllabus content.

Increased use of formative assessment

Another programme change reported by all of the interviewees was an increase in the use of formative assessment. According to ERO (2004) this was one of the most commonly cited changes reported by all teachers of all subjects. The interviewees used formative assessment for both the internal and external achievement standards. The nature of this formative assessment in the first year tended most frequently to be in the form of practice tests (i.e. formal formative

assessment) from which feedback was then given. This combined with the actual summative assessments for the internals plus reassessment opportunities meant assessment loads were high. By the end of the year the interviewees recognised that this large assessment marking load was unsustainable in terms of workload. Although not always stating it explicitly, the interviewees implied that their geography programmes were too achievement standard focused, with assessment taking priority over the students' learning needs.

More formalised recording and reporting

The other major NCEA related change noted by all of the interviewees was that their reporting and recording systems had become much more formalised and aligned to school wide policies. Although some mentioned a constant ongoing pressure to meet set deadlines, most also referred to advantages. These included being more vigilant in recording results, retaining and filing student work, and being alert to authenticity issues. Keeping more detailed records helped when giving guidance to students, as to which NCEA standards they should enter for. The students were getting better at verifying their results and being proactive in tracking their own progress. Recording had become easier, because of school wide structures put in place supported by commercial software packages. Likewise report writing had benefited from being conducted electronically.

Confidence Levels

Towards the end of 2002 the interviewees felt they had been reasonably successful in implementing Level 1 NCEA geography. They expressed increased confidence in aspects that they had found challenging at the start of the year, such as planning achievement-based assessment programmes and designing activities and schedules. They felt they were far wiser about NCEA implementation after one years experience and were keen to trial new ways to manage learning and assessment more effectively, in 2003, to help reduce the assessment load.

One aspect that they still felt uneasy about however was applying the schedules to student work and making the final judgement calls. Alison (2005) acknowledged that making judgements especially at the grade boundaries was a big challenge for most teachers. She suggested this was because of the fairly generalised nature of the achievement standard descriptors and also the subtleties of the language involved. Black (2001) agrees with Alison and indicates that making holistic and complex judgements calls for the greatest expertise in an area where teachers' experience is the weakest.

It would be fair to say that during the geography training in 2001 the perception of how to make 'holistic judgements' was still in its infancy. Initially the notion was that all 'achievement criteria' had to be met before achievement could be awarded, and that all the 'merit criteria' had to be achieved before merit could be gained etc. in a similar way that all 'performance criteria' must be met to gain an 'element' in unit standard-based assessment. The practice of looking at all of the evidence and deciding on how much is required for sufficiency for each grade level, and the various ways in which this sufficiency could be demonstrated, is taking time to develop. Black (2001) indicates that what is needed in professional development training, is the provision of exemplars of assessment tasks together with richly annotated examples of student work. Hopkins, Telfer and Butt (2001) agree with Black and also make the point that holistic judgement making involves a 'professional' rather than a 'technical' or 'bureaucratic' approach to assessment. They argue that the most effective way for teachers to gain consistency in judgement making, is to have teachers talking to each other, discussing student work and together reaching agreement about what evidence we might expect to find at each achievement level. They believe this plus the development of departmental portfolios of selected pieces of students' work is of crucial importance in the assessment process. The portfolios exemplifying the agreed standards and providing benchmarks against which the achievements of all students can be judged. They felt comparability would also improve over time as a common understanding of the grade assessment criteria for each geography achievement standard is reached.

The interviewees perceived the Level 1 2002 external examinations in a positive light over all. They felt there were no real surprises and that the three hour time allowance was fair. The major concern was with the disappointing results their students gained Achievement Standard (AS) 1.2 'Examine population patterns, processes and issues'. The results reflected a national wide trend with 67% of all candidates awarded 'not achieved' and only 1% awarded 'Achievement with Excellence'. In this regard, references were made to the marking schedule and sufficiency statement of AS 1.2, which was perceived as being fundamentally different from that of the other two PCT schedules. A call for standardisation in the PCT judgement / sufficiency statements was made.

The interviewees thought that the grades students' achieved in the geography external papers apart from AS 1.2 reflected their abilities. However concerns were expressed when comparing the geography results for the external assessments with those of other subjects at the national level. For example, in the 2002 external papers 3.5% of geography Level 1 candidates gained

excellence compared with 18.75% of the history candidates, bringing the question of comparability between subjects into question. The interviewees asked “Was an Excellence grade in geography too hard to achieve?” “Would geography suffer as a result?” “Would fewer students opt to take geography at Year 12?” Alison (2005) noted that teachers in general needed to see greater comparability within and between subjects in order to restore faith in the NCEA external exams.

Two of the interviewees raised a concern regarding the impact of credit accumulation on student motivation. They indicated their students were quick to work out the number of credits they needed in the external exams to accumulate the eighty credits required to gain the Level 1 NCEA qualification. In the exam many of these students selected the number of papers they needed to complete in order to accumulate sufficient credit and once they had completed these they walked out, often without striving for merit or excellence passes within the papers they had chosen. While this scenario did not apply to all interviewees’ schools in 2002, it begs the question also raised Alison (2005), does the 80 credit limit for NCEA de-motivate students and foster a minimalist approach to assessment? This is quite a vexed question, for example one interviewee indicated that students at their school were targeting merits and excellence in the 2002 examinations, while another intimated that students who would not have been successful in School Certificate Geography were experiencing success by gaining some credits towards the NCEA qualification.

The interviewees did believe the grades achieved in 2002 were having implications for teaching with regards to an increase in the number of less academically orientated students enrolling for Year 12 Geography in 2003. They felt this was due to the standard for Level 1 NCEA achievement grade, at least for the externals, being set at a lower level than previously required to achieve School Certificate. Several of the interviewees reported in the interviews conducted in 2003 that they were finding a number of students who gained achievement in NCEA Level 1 were finding Year 12 Geography too much of a hurdle and were not coping. Two interviewees had set minimum entry levels, one at 12 credits, and the other at 15 credits plus HOD discretion, but still found they were getting a long tail of students who were struggling. The interviewees felt further consideration was necessary into what constitutes a fair and reasonable entry level into Year 12 geography, and that this issue warranted more discussion and time before a satisfactory solution might be found. Alison (2005) also drew attention to the challenge of resolving what if any prerequisites to set, to enable students to move up into the level in which they are best able to achieve success. She thought little support had been given to develop

policies about prerequisites to guide students and that models of systems which schools have found to work, should be disseminated rather than having every school “reinvent the wheel.”

Stage Two

The focus of Stage 2 commencing in 2003, involved the interviewees reviewing and fine tuning NCEA related assessment practice in light of the 2002 experience. The challenges identified for this stage at Level 1 included: addressing the balance between assessment and teaching and learning, managing the NCEA workload more efficiently, and developing increased confidence in applying assessment schedules and making holistic judgements. It should be noted that the 2003 challenges needed to be addressed simultaneously with the implementation of Level 2 NCEA geography.

Factors that assisted with the ongoing implementation of Level 1 NCEA geography during 2003, additional to those mentioned for 2002 were:

- The experience gained during 2002, including greater familiarity of NCEA assessment systems and achievement standards.
- Enhanced confidence levels associated with the above.
- Improvements made to the external moderation system.

An additional obstacle, especially for the smaller departments, was the lack of time available to conduct a full review, due the additional workload commitments associated with implementing Level 2 NCEA geography.

Assessment is an integral part of teaching and learning. By modifying the way in which they conducted NCEA assessment in 2003, the interviewees knowingly or not, were also changing the nature of the teaching and learning occurring within their geography classrooms. An important difference identified occurring in 2003, was that students as ‘learners’ were being given far greater consideration as part of the assessment system. With all of the technicalities and procedures involved in setting up and running NCEA in 2002, student needs as learners appeared at times to be neglected, as teachers understandably focussed on assessment priorities such as sourcing and modifying sufficient assessment activities and schedules, and following new school wide procedures and policies. With these priorities addressed, the interviewees made considerable shifts towards assessing less better, and placing more emphasis on assessment for learning (as opposed to the assessment of learning) during 2003. The assessment changes made by the interviewees to improve the learning / assessment balance are outlined below.

Credit reduction

An important strategy used by the interviewees was to ‘assess less better.’ This included: credit reduction i.e. selectively dropping an achievement standard, limiting or eliminating reassessment opportunities, utilising resubmission, and replacing ‘formal’ with ‘informal’ formative assessment activities. In 2003 half of the interviewees reduced the number of credits on offer through selectively dropping an externally assessed PCT. Knowing students required only 80 credits in total across all subjects for NCEA, they reasoned there was no need for students to attempt all credits in every subject. In one of the interviewee’s schools reducing the number of credits offered by each subject became official school policy in 2003. Dropping an achievement standard helped interviewees to reduce assessment loads and free up more time to spend on learning. Two of the interviewees dropped AS 1.3 Examine resources use in a farming and mining context, selected because the PCT did not excite their particular student cliental. Another dropped AS 1.2 Examine population, patterns, processes and issues, selected due to extensive content coverage required by this PCT. In analysing the national statistics at level one, these two external achievement standards, especially AS 1.2, have consistently attracted the least number of student examination entries since 2003 indicating this is a reasonably widespread trend. In terms of syllabus coverage one interviewee, although not offering the population studies topic for external assessment, did use part of the content to assess the internal achievement standard involving examining a geographic issue. The other interviewees offered only very brief or no coverage of the topics they selected to drop, which could have possible repercussions for students when they enter Year 12.

Use of resubmission

A second time saving strategy adopted by the majority of interviewees, involved cutting back or completely eliminating reassessment opportunities and utilising resubmission if appropriate instead. Although reassessment was widely used in 2002 and the interviewees could recognise the benefits for the students, they indicated they frequently struggled to find sufficient opportunities for it time wise, and that the marking reassessment generated added to workload pressure. In the one school where reassessment was still ongoing for 2003 it was only for those who had not achieved, was conducted outside of class time, and administered by learning support staff.

Interviewees indicated that problems associated with reassessment went beyond supervising the tests and the additional marking generated, as it required having time to source or write an additional assessment activity with an equivalent degree of difficulty. The interviewees indicated

that the use of resubmission in 2003 was helping to eliminate the need for offering reassessment opportunities. Resubmission was used only for students who were close to the achievement grade boundaries, and normally done by conferencing before the marking schedule was gone over with the class. Interviewees felt aggrieved resubmission (seeking evidence where appropriate orally or in some other way rather than repeating a whole new assessment task) had not been allowed by NZQA until almost mid way through 2002, as it provided yet another way they could reduce the assessment load for themselves and their students.

Increased use of formative assessment

The role and purpose of formative assessment also changed in four of the six case study departments. These interviewees were making less use of 'formal' formative practice test assessments with feedback to prepare students for their internal summative assessments. Instead, they were making increased use of daily classroom learning activities or 'informal' formative assessment to prepare and monitor student progress, utilising specific feedback and feed forward plus encouraging students to use self and peer assessment. Interviewees for example, talked about having students working in pairs or small groups to discuss what they could do to create an excellent answer using the achievement standard assessment criteria or debating what made one model answer better than another. While interviewees had been using such informal formative assessment with their junior social studies classes, this had not been the case with their Year 11 geography classes until now.

As indicated by Baldwin (2003) and Lambert (2003) formative assessment helps to: inform students of the standards they have reached (feedback), diagnoses their strengths and weaknesses, provides students with what they need to do next to improve (feed forward) and helps the teacher plan future work. A major advantage of formative assessment is that it integrates assessment with teaching and learning rather than being something done after the teaching and learning has finished. Although formative assessment is integrated into learning and can reduce marking loads, it does not happen of its own accord and requires careful planning. Research by Baldwin (2003), with regards to the use of formative assessment by geographers in relation to NCEA implementation, indicated that while teachers were aware of the importance of formative assessment, and were using a number of related strategies, they would benefit from further training and professional development to enhance their practice. Formal formative assessment was still considered important by the interviewees for assessing the external standards in order to simulate the external examination conditions. By eliminating the use of reassessment and utilising informal formative assessment practices, several of the interviewees

were reducing the number of assessment activities required for the internal standards from seven to three. By selectively dropping a PCT, a further reduction involving the cutting two external assessment activities was made (Refer to Appendix 6 b).

Assisting Learning

Interviewees reported several other changes made to their assessment programmes to assist the learning process. These included making the internal assessment activities more school and community specific. They implied that students found activities relating to local places and issues much more interesting, relevant and easier to connect with in terms of understanding. Three interviewees indicated they were trying to make assessment activities more focussed and manageable for themselves and the students. For example they were changing the internal assessments that required many hours of student work beyond the classroom, and hours of staff marking, so they became more targeted and less demanding time-wise. Two interviewees also changed the order in which they assessing the inquiry based internal achievement standard AS 1.5 Carry out and present geographic research, from being first up in 2002 to doing it last in 2003. This was in order to give the students more time to master the large number of geographic skills involved in this standard. Also having had a year's NCEA experience, interviewees were being more stringent in 2003 at sticking to the programmes planned, and at giving students realistic guidance concerning assessment expectations and deadlines.

Innovation

In terms of innovation one interviewee was experimenting with offering a mix of achievement standards taken from both geography and history, primarily aimed at catering for the needs of the less academic learners. Two flow-on advantages of creating this Level 1 social science class were that the needs of the less academic students were being better met, and that the geography class was able to move forward at a better pace and with fewer behavioural interruptions. Another interviewee discussed mixing and matching achievement standards from different subjects including geography for 2004, but more likely to be offered at Level 2 than Level 1 with a sustainability theme. The other option discussed by two interviewees, but for implementation in 2004 not 2003, was using the equivalent internally assessed geography unit standards, instead of offering the achievements standards for either AS 1.2 or AS 1.3 in the external exams. The three perceived advantages were firstly that the PCT chosen could be still be assessed but using just one setting, saving teaching time. Secondly the students would still gain credit towards NCEA (in fact 4 credits instead of 3). Thirdly because unit standards are assessed internally, it would provide the able students with more external examination time to write the comprehensive

answers required for merit and excellence. Analysis of the 2005 National Qualification Framework statistics for geography at level 1, indicate the number of exam entries for AS 1.2 Examine population patterns, processes and issues, is the lowest by a significant number for, while the numbers entering for the equivalent unit standard far exceed all others, suggesting schools may be exercising this proposed option.

The above changes and proposed changes illustrate how the interviewees during 2003 were thinking more strategically about how to repackage learning and assessment opportunities in order to redress the learning / assessment imbalance created in 2002. The changes also highlight the new pathways being opened for geography students resulting from achievement standards and NCEA implementation.

Time and experience

With the hindsight of more than one year's experience, the interviewees expressed an increased growth in confidence levels. They expressed confidence in how the NCEA systems worked, and in their own familiarity with the Level 1 geography achievement standards. With the benefit of time and experience they felt more comfortable with making judgements and recognising the standards, and their initial concerns regarding resubmission and reassessment were waning. The interviewees also felt timing and related workloads were being managed more efficiently from changes made such as doing less better, utilising informal formative assessment, and not feeling pressured into offering the maximum number of credits. The interviewees were also unanimous that the experiences gained in implementing NCEA at Year 11 were helping to make the transition towards implementing NCEA at Year 12 in 2003 easier. The one area the interviewees still felt uneasy about was using the eighteen Maori concepts associated with the achievement standards. This is not so much an assessment related problem as a curriculum coverage issue. It has been noted that in some of the more recent Geography Assessment Specifications, notice of specific Maori concepts to be examined have been specified, to assist teachers and students with the transition.

Chapter 5 Concluding Comments and Recommendations

In this section concluding comments are made, along with future research suggestions and recommendations for future practice.

This research provides a valuable insight into how the six selected geography departments made sense of implementing Level 1 NCEA geography achievement standards. The evidence shows that the geography teachers put in a considerable amount of time, effort and work to make paradigm shift from norm-referenced assessment to achievement standards-based assessment. The workload initially involved the challenges of getting Level 1 NCEA geography up and running in 2002. Then, from the start of 2003 onwards the challenges involved experimenting with strategies to help make NCEA related assessment more manageable with regards to workload, and less dominating in relation to teaching and learning. The evidence also shows that in addressing the above implementation challenges, the needs of the six case study departments were not always identical and nor were the choices they selected to manage the process. It also shows that accessibility to different types of professional development support is required, especially at the individual department level, as 'one size does not necessarily fit all'.

The evidence shows that the geography departments were hindered by poor change management in the process of implementing the Level 1 geography achievement standards. The appearance of flawed geography internal exemplar materials, the late arrival of external exemplars and examiners reports, the unsupportive and patchy nature of external moderation (especially in 2002), the delayed introduction of resubmission, the unrealistic nature of the geography assessment programmes disseminated during teacher workshops in 2001, and having achievement standards that expanding the existing syllabus coverage, were perceived by the interviewees as implementation obstacles.

The above obstacles were in part off set by several of support systems the interviewees perceived as valuable. The evidence shows that the interviewees viewed positively the facilitation workshops, networking opportunities and the provision of time made available for planning. This was particularly the case where the process(es) involved, enabled the teachers from different schools to work together collaboratively, sharing ideas and providing each other with mutual support. The evidence also highlighted the important roles performed by the regional subject advisor, and the national and regional geography associations in supporting the NCEA implementation process. Another important factor assisting the implementation was time and

hands on experience gained through assessing against the achievement standards, which led to improved confidence levels and familiarity with the NCEA related processes.

The evidence has also shown that the implementation of the geography achievement standards did impact on classroom teaching and learning in a number of ways. The expansion of the geography syllabus via the achievement standards added to the teacher workload requirements. The allocation of credit weightings led to a reduction of time allocated to teaching the prescribed common topics, and an increase in time spent teaching the school selected studies. The interviewees reported in hindsight that in 2002 much of their energy was focused on getting NCEA geography up and running. They recognised that during this time the student needs as learners, appeared to take second place to assessment implementation in their geography programmes.

The evidence indicates that in 2003 the learners were as a result given greater consideration in relation to NCEA geography assessment. Most departments displayed a shift towards 'assessing less better' with a greater focus on assessment for learning. Evidence of strategies used to strategically repackage assessment programmes to improve the learning / assessment imbalance included selectively dropping achievement standards, increased use of informal formative activities, use of resubmission rather than reassessment; making internal assessment task more targeted and local community based, swapping the order of assessments, experimenting with innovative courses by mixing and matching different achievement standards, and considering the use of unit standards to assess some of the prescribed topics.

Towards the end of term three 2003, with not quite two years experience of implementing Level 1 NCEA, the evidence strongly suggested that the six case study geography departments were already a long way towards developing effective systems for the assessment of the students against the Level 1 NCEA geography achievement standards. While the interviewees did perceive the implementation process as hard work and acknowledged the demanding workloads, they seldom mentioned their own professionalism and high commitment levels evident in helping make NCEA work, nor their dedication to best meet the needs of the students in their Level 1 geography classes. Their hard toil did appear, at least from the interviewer's perspective, to contribute a great deal in helping to make NCEA geography successful for their students.

Limitations of the study

As was mentioned in the methodology section there was no intention to generalise the findings emerging from this study. In qualitative research the researcher's subjectivity and viewpoint can affect the research and must be taken into account. This research topic was chosen because of the researcher's interest and involvement in assessment reforms that have taken place, at the senior secondary school level, over the last three decades. It was seen as being advantageous to research factors perceived by teachers as helping or hindering them in managing NCEA assessment implementation at the departmental level. Another researcher with a different focus or purpose in mind may have interpreted the data collected differently. Similarly not everything about each case study can be reported, and it is the researcher who chooses what is relevant to include or leave out.

Peoples' perspectives and interpretations of aspects of the NCEA implementation are expected to be different. This research looked at the perspectives of only six case study informants, and as such it is impossible to extrapolate or generalise beyond these participants' viewpoints. Because of this the findings may reflect features that are unique to the six schools selected, and may not be typical of other schools, or of schools located in different region regional settings. The case study informants themselves posed potential limitations, the research being reliant on their memories to recall accurately and not forget any of the factors they perceived as important in helping or hindering them implement NCEA. While acknowledging the above limitations it was hoped that the measures put in place to address validity, such as providing informants with the research focus questions prior to the interviews, the use of data triangulation to look for convergence between emerging themes, the use of peer checking, plus the comparison of findings with those in other relevant reports, helped to ensure the research reliability and trustworthiness.

Despite the possible limitations referred to above, the research does shed light on the assessment implementation experiences of six case study geography departments selected. Their individualised accounts on how they made sense of implementing NCEA assessment change at Level 1 is important, adding to our wider conceptual understanding regarding the subtleties and complexities of implementing assessment change. While the use of semi-structured interviews, as opposed to a postal survey, may have limited the number of participants who could be studied within the time framework of this study, the interviews did generate rich detailed data from which to make meaning.

Future Research Possibilities

With NCEA now implemented at Level 1 future research possibilities have been identified as a result of this study. These include, investigating:

- How students' perceive achievement standards-based assessment within a geography context.
- Innovative ways for assessing and gathering of evidence of achievement, now that teachers are more comfortable with achievement standard- based assessment.
- How geography teachers can reach agreement about judgement making, with some degree of consistency, within departments and between schools.
- The range of formative assessment strategies used by teachers to help prepare students for NCEA, and how formative assessment can be utilised to further influence geography teaching and learning in a positive way.
- Other effective changes being experimented with to further improve the learning / assessment balance and to further reduce teacher student workloads.

Recommendations

That in regards to the ongoing implementation of Level 1 geography achievement standards:

- Access to appropriate, targeted support at the individual department level is made available. Recognition that one size does not fit all.
- Small departments in particular, receive help and guidance form advisory services, plus funding and time made available to assist with networking.
- NCEA professional development courses provide sufficient time for teachers to engage in professional dialogue and opportunity to share ideas and resources.
- Geography teachers use links with other schools, subject associations and other colleagues within their schools to enhance their assessment expertise (in areas such as making holistic judgements and enhancing formative assessment practice).
- Widespread dissemination of good assessment practice be shared between departments both regionally and nationally. (To prevent “reinventing the wheel,” to ensure proper balance between assessment / teaching and learning, and to help reduce teacher workloads)
- TKI and NZQA websites update and model innovative and flexible geography assessment exemplars, developed as teachers become more comfortable with NCEA assessment and experiment with a greater variety of assessment strategies.

- Portfolios exemplifying agreed standards and providing benchmarks against which the achievements of students can be judged be encouraged at the departmental level and beyond.

That in regards to future assessment reforms, that:

- Quality assessment exemplar materials are made available to ensure teacher confidence is maintained.
- Professional development courses incorporate how to design and adapt assessment activities, pre the implementation stage.
- Central agencies such as MOE and NZQA ensure policies and procedures and assessment reports are transparent, and signalled in a time framework which enables teachers to adapt their practice without undue pressure.
- Facilitation workshops provide sufficient time for collaboration and critical dialogue between participants.
- The fostering of professional communities, whereby schools work together collaboratively and share models of good practice, are encouraged.
- Incorporating syllabus / curriculum change via assessment reform is actively discouraged.
- External moderation supports implementation through the provision of constructive feedback and feed forward to teachers, especially in the early stages.
- The role of subject associations, national and regional, are recognised as providing essential and complimentary roles to those performed by central agencies and would benefit from time and or monetary assistance.
- The benefits of a trial are not overlooked.

Supervision

Dr Lindsey Conner School of Sciences and Physical Education
College of Education
lindsey.conner@canterbury.ac.nz
Work phone 345 8204 extn. 44463

Roger Baldwin Education Plus
College of Education
roger.baldwin@canterbury.ac.nz
Work phone 349 5731

Refer to Appendix 4 for a copy of the Application for Appointment of Supervisors and letter granting approval.

References

- ACT New Zealand. (2002). *"Not Achieved" Inquiry into the National Certificate of Educational Achievement. Presented to the House of Representatives*. Wellington: House of Representatives.
- Alison, J. (2005). *Teachers talk about NCEA: Research report on focus groups with secondary teachers. Summary version*. Wellington: PPTA.
- Baldwin, R. (2003). Teacher's use of feedback comments to improve student achievement in standards based assessment. *International Journal of Learning*, 10, 1197-1208.
- Benz, C., & Newman, I. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*. Carbondale: Southern Illinois University Press.
- Black, P. (2001) *Report to the Qualifications Development Group, Ministry of Education, New Zealand on the proposals for development of the National Certificate of Educational Achievement* [NCEA Policy Documents], Retrieved [2002], from <http://www.minedu.govt.nz>
- Burns, R. B. (1997). *Introduction to research methods* (3rd ed.). Sydney: Longman.
- Codd, J. (1995). *NZQA and the politics of centralism*. Paper presented at the annual meeting of the New Zealand Association for Research in Education, Palmerston North.
- Creech, W. (1998). *Launch of Achievement 2001- School qualifications for 16 to 19 year-olds*. Speech notes given at Rangiora High School, 5 November 1998. Wellington: Ministry of Education.
- Cresswell, J. (1994). *Research design. Quantitative and qualitative approaches*. London: Sage Productions.
- Dobric, K. (1998). *The senior secondary school: Potential or polarisation?* Paper presented at the annual meeting of the New Zealand Association for Research in Education, Dunedin.
- Donnelly, K. (2000). *New Zealand's National Certificate of Educational Achievement (NCEA): An international perspective*. Auckland: Education Forum.
- Education Review Office. (2004). *Progress of NCEA levels 1 and 2, and readiness to implement level 3. Executive Summary*, 2004, Retrieved 11 March 2004 from <http://www.ero.govt.nz/Publications/pubs2004/NCEAFeb04.htm>
- Elley, W. (1996, June 21). Enough of the Fudge and Evasion, the NZQA's Plans just will not do. *The Christchurch Press*, p.11.
- Fastier, M. (2001). The evolution of achievement standards based assessment in the New Zealand senior secondary school context. *The New Zealand Journal of Geography*, 111, pp 16-23.
- Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York: Open University Press.

- Hargreaves, H., & Earl, L. (2002). Perspectives on alternative assessment reform. *American Educational Research Journal*, 39(1), 69-95.
- Hopkins, S., Telfer, S. Butt, G. (2001). *Assessment in practice: Raising standards in secondary geography*. Sheffield: Geographical Association.
- Hipkins, R., Conner, L. and Neill, A. (2005) *Shifting balances II The impact of level 1 and 2 NCEA implementation on the teaching of geography and home economics*. Wellington: New Zealand Council for Educational Research.
- Irwin, M. (1999). *Achievement 2001*. Wellington: New Zealand Council for Educational Research.
- Irwin, M., Elley, W., & Hall, C. (1995). *Unit Standards in the National Qualifications Framework*. Auckland: Education Forum.
- Johnson, R. (1997) Examining the validity structure of qualitative research. *Education*. 118(2) 282-290.
- Lambert, D. (2003). Using assessment to support learning. In A. Kent (Ed.), *Reflective practice in geography teaching*. London: Paul Chapman.
- Mason, J. (1998). *Qualitative researching*. London: Sage Productions.
- Maykut, P., & Morehouse, R. (1994). *Beginning qualitative research*. London: Falmer.
- McCann, G. (1999). *Assessment for the Secondary Sector*. Wellington: PPTA.
- McCarthy, C. (2000). NCEA resourcing to the fore. *New Zealand Education Review*, 5(28), 3.
- McKay, J. (2001). How it was that exam results became the talk of the steamie. *Critical Quarterly*, 43(1), 94-103.
- Ministry of Education. (2000a). National Certificate of Educational Achievement, *Speech Notes given at the Secondary School Sector Forum on 11 March 2000*. Wellington: Ministry of Education.
- Ministry of Education. (2000b). *The National Certificate of Educational Achievement Regional Facilitator's Training Guide*. Wellington: Ministry of Education Qualification Development Group.
- Ministry of Education. (1990). *Syllabus for schools. Geography forms 5-7*. Wellington: Learning Media.
- Ministry of Education/NZQA. (1998). *Achievement 2001: Qualifications for 16 to 19 year olds*. Wellington: Ministry of Education/NZQA.
- New Zealand Board of Geography Teachers. (1999). *Position paper: Future directions of geography education and assessment for 2001 and beyond*. Hamilton: New Zealand Board of Geography Teachers.
- New Zealand Qualifications Authority. (2002). NCEA Update, 11.

- Patton, M. (1990) *Qualitative evaluation and research methods* (2nd ed.) Newbury Park, CA: Sage Publications.
- Post Primary Teachers' Association. (1997). *Te Tiro Hou. Report of the Qualifications Framework Inquiry*. Wellington: PPTA.
- Post Primary Teachers' Association. (2002). *The NCEA result: Not yet achieved: An executive summary*. Paper presented at the PPTA Annual Conference, 2002.
- Priestly, M., & Higham, J. (1999). New Zealand's curriculum and assessment revolution. *The 14-19 Research Group Occasional Publication*, 8.
- Robinson, C. (1997). *Real world research*. Oxford: Blackwell Publishers.
- Roberts, P.(1997). A critique of the NZQA policy reforms, in: M. Olssen & K.M. Mathews (Eds) *Education policy in New Zealand: The 1960s and beyond*, Palmerston North: Dunmore Press.
- Smithers, A. (1997). *The New Zealand Qualifications Framework*. Auckland: Education Forum.
- Strachan, J. (2001). *Certification systems in the senior secondary school. Some international perspectives*. Wellington: NZQA.
- Strathdee, R., & Hughes, D. (2001). The National Qualifications Framework and the discouraged worker effect. *New Zealand Education Review*, 36(2), 155-169.
- Tobias, R. (1999). Lifelong learning under a comprehensive national qualifications framework - rhetoric and reality. *International Journal of Lifelong Learning*, 18, 110-118.
- Yin, R. (1994) *Case study research. Design and methods*. Thousand Oaks: Sage

Appendices

Appendix 1 Letter sent to participants, including consent forms

1a: Sample letter requesting subject participation and associated consent form.

Murray Fastier
Christchurch College of Education
PO Box 31-065
CHRISTCHURCH 8030

20 July, 2002

Dear

As part of a masters research thesis concerning Teachers' perceptions relating to the implementation of Level 1 Geography Achievement Standards within the New Zealand Senior Secondary School context.

I would like to request two interviews with you (each approximately 45 minutes in duration) to gather qualitative research data on the implementation of the Level 1 Geography Achievement Standards, as perceived from a teachers point of view. The first interview would be conducted towards the end of 2002 and the second in 2003, to look at how perceptions may have changed one full year after their initial implementation. The selection criteria being used for choosing teachers for the interview process is that they be involved with implementing the Level 1 Geography Achievement Standards and come from different types of school e.g. both single sex and co-educational. The data collected will be analysed for reoccurring themes in order to investigate impacts of the achievement standards on both teaching and learning.

Please note that all responses will be kept confidential and if you are quoted only your designation will be used (e.g. geography teacher; H.O.D. Social Science etc.) and schools will not be specifically named.

The key questions I will focus on are:

- How many years have you been teaching Year 11 geography classes?
- What number of pupils are in your Year 11 geography class(es) this year?
- What prior knowledge of and experience have you had with standards based assessment?
- How challenging are you finding the implementing NCEA related assessment changes at Year 11?
- Which implementation support systems do you consider to have been most valuable?
- What obstacles do you feel have been hindering the implementation process?
- How transparent have you found the level one geography assessment criteria for teachers and students?
- What major concerns, if any, have you encountered in implementing the geography achievement standards?

- What changes, if any have you had to be made to your Year 11 teaching programme as a result of implementing the Level 1 achievement standards?
- What other new or different processes / procedures have been involved in integrating the NCEA assessment changes into classroom practice?
- Which aspects of achievement-standards based assessment do you feel most confident / least confident about doing?
- What are your personal views of the NCEA qualification and related achievement standards based assessment approach? How have your perceptions come about? Are your views the same as the other members of your department?
- Do you feel the grades being achieved by the students fairly reflect their ability? How would you best describe student attitudes towards the achievement-standards based assessment in geography?

I would be happy to clarify any queries you may in relation to this research. If you are able to participate please complete the consent form attached and return to me in the envelope provided (or alternatively fax me at 348 4311 or e-mail me at murray.fastier@cce.nz). Contact phone number should you wish to ring is 348 2059 Ext. 8457.

Participation in research project titled:

Teachers' perceptions relating to the implementation of Level 1 Geography Achievement Standards within the New Zealand Senior Secondary School context.

Name: _____ **Designation:** _____

Consent

1. I am willing to be interviewed for this research. Yes / No
2. I am willing to be tape recorded
(for ease of note-taking only) Yes / No
3. I am available to be interviewed at the following times between _____ and
_____ :
- _____
- _____

at the following location:

I have read and understand the description of the above-named research project.
On this basis I agree to participate as a respondent in the project, and I consent to publication of the results of the project with the understanding that anonymity will be preserved.
I understand also that I may at any time withdraw from the project, including the withdrawal of any information that I have provided.

Signed: _____ Date: _____

Should you have any concerns regarding the researcher or this project a copy of the College complaints procedures, outlining the steps involved and the initial contact person are also enclosed.

With Thanks

1b: Sample 'draft' letter two requesting subject participation and associated consent form for second round of interviews in 2003.

Murray Fastier
Christchurch College of Education
PO Box 31-065
CHRISTCHURCH 8030

31 July, 2003

Dear

Firstly thank you for participating in the first round of interviews relating to my masters research thesis concerning:

Teachers' perceptions relating to the implementation of Level 1 Geography Achievement Standards within the New Zealand Senior Secondary School context.

I would now like to request the second and final interview with you (approximately 30-45 minutes in duration) to gather data re:

- your perceptions of the 2002 external Level 1 Geography examinations and resulting student grade distributions, and
- how your perceptions regarding Level 1 implementation may have altered.

Please note that all responses will again be kept confidential and if you are quoted only your designation will be used (e.g. geography teacher; H.O.D. Social Science etc.) and schools will not be specifically named.

The key questions I wish to focus on this time are:

- What were your impressions of the Level 1 2002 Geography external examinations? (e.g. content skills assessed, coverage of achievement standards, layout, degree of difficulty, time allowance, resource materials provided and consistency between the papers).
- How helpful have you found the examiners reports and sufficiency statements now available on the NZQA web site? Has the delay in their availability been of any concern?
- Do you feel the grades achieved by the students in the external papers fairly reflected their ability?
- How would you best describe student attitudes towards the 2002 external geography papers and results?
- Have student Level 1 achievement grades generated in 2002 had any implications for teaching geography at the Year 12 level this year? If so what?
- How do you perceive the Consultation Review Changes proposed for the Level 1 Geography achievement standards in 2004?

- What changes, if any have you made to your Year 11 teaching / assessment programme(s) as a result of last years experience? (E.g. number of achievement standards offered, changing internal assessment activities, building in more formative assessment opportunities etc).
- Has the workload at level 1 become any more manageable this year compared to 2002? (Are you becoming more confident in making judgements, designing your own assessment activities, moving away from existing templates etc).
- Do you still have concerns? (E.g. relating to re-assessment, moderator comments, authenticity, consistency between schools, workloads, quality of assessment exemplars, availability of ongoing support, access to web sites, impacts on students, credibility issues).
- Do you felt better prepared for the implementation of level 2 geography achievement standards? Please indicate why /why not?

I would be happy to clarify any queries you may in relation to this research. I can be contacted by fax at 348 4311 or e-mail murray.fastier@cce.nz or phone should you wish to ring 348 2059 Ext. 8457. I will try and make contact with you later during the week.

Yours sincerely

Murray Fastier
Senior Social Science Lecturer
Christchurch College of Education

Appendix 2 Application for Ethical Approval



Christchurch College of Education
MTchLn Research Project or Thesis



Application for Ethical Approval

To be completed by student AND supervisor(s), submitted at the same time as Application for Academic Approval to the MTchLn Administration Officer.

Researcher's name John Murray Lang Fastier

Supervisor(s) Lindsey Conner (&) Roger Baldwin
(tick one)

Course: ☐ TL802 (Project) ☐ TL803 (Project) ☐ TL804 (Thesis) ☒ TL 805 (Thesis)

Project/Thesis Title Teachers' Perceptions regarding the implementation of the Level 1
Geography Achievement Standards within the New Zealand Secondary School Context.

PLEASE ATTACH THE FOLLOWING TO THIS FORM

ONE COPY of a detailed research proposal outlining the context of the research, its aims and methodology (see the Research Handbook for Proposal requirements).

TWO COPIES of a completed Christchurch College of Education Ethical Clearance form with the appropriate attachments. The College's ethical guidelines, clearance forms and formats are available from the Christchurch College of Education intranet at <http://rata.cce.ac.nz/research/ResHome.htm>

Signed (student) John Fastier Date 11/9/02

Supervisor(s) Signature(s)

1 [Signature] Date 16/9/02

2 [Signature] Date 17/9/02

This section to be completed by MTchLn Administrator

Proposal received in MTchLn office (date) _____

Sent to Executive Office of Ethics Committee (date) _____

Ethics committee report received (date) _____

This section to be completed by Ethics Committee and returned to MTchLn Administrator.
Original letter to student, cc to supervisor and MTchLn Administrator.

☐ Approved ☐ Not approved

Signed (per Ethics Committee) _____ Date _____



CHRISTCHURCH
COLLEGE of EDUCATION
Te Whare Whai Matauraka Ki Otautahi

APPLICATION FOR ETHICAL CLEARANCE/APPROVAL OF RESEARCH PROJECTS 2002

All submitted applications must be word processed, and include the appropriate attachments and signatures.

PRINCIPAL RESEARCHER*: John Murray Lang Fastier
Email Address: murray.fastier@cce.ac.nz Ext: 8457

ASSOCIATE RESEARCHER (S):

SCHOOL/ ADMINISTRATIVE AREA: SCHOOL OF
SECONDARY TEACHER EDUCATION

PROJECT TITLE: The Implementation of the Level 7 Geography Achievement Standard
in the New Zealand Secondary School Context: Geography Teachers' Perceptions

SECTION A: RESEARCH PROJECT

1 ARE YOU EXEMPT FROM ETHICAL APPROVAL AS DEFINED IN THE LIST OF EXEMPTIONS (ON THE INTRANET AND AS LISTED IN SECTION E)? IF,

YES ☐ GO TO SECTION E1 (DECLARATION) NO ☒ GO TO Q 2

2 WHICH OF THE FOLLOWING CATEGORIES BEST DESCRIBE YOUR RESEARCH PROJECT?
(Please tick one box only)

- ☒ Educational or social science research involving humans
☐ Psychological research involving human and/or animals
☐ Scientific research involving humans and/or animals
☐ Other (Please specify) _____

3 WHAT IS THE PURPOSE OF YOUR RESEARCH PROJECT? (Please tick one)

- ☐ Staff research
☒ Honours, MTchLn or Level 8 Research
☐ PhD research

4 WILL THIS PROJECT REQUIRE ETHICAL APPROVAL FROM OTHER BODIES?
e.g. University of Canterbury Human Ethics Committee

YES ☐ NO ☒

If yes, explain how this approval has been obtained, enclosing copies of relevant correspondence.

5 IS THIS PROJECT BEING EXTERNALLY FUNDED?

YES ☐ (Please specify) _____

NO ☒

*For collaborative projects, the principal researcher is responsible for all aspects of project management, including re-applying for ethical clearance should circumstances relevant to this application change. All correspondence will be with the principal researcher.

6 WHAT METHODS WILL BE EMPLOYED IN CONDUCTING YOUR RESEARCH?

(Please tick more than one box if needed)

- ☒ Examination of normal educational practice or education instructional strategies, instructional techniques, curricula, or classroom management methods, journal, existing data, documents etc.
- ☐ Questionnaires or surveys
- ☐ Examination of medical, educational, personnel or other confidential records
- ☐ Observation (covert)
- ☐ Observation (overt)
- ☒ Structured interviews *Semi Structured.*
- ☐ Unstructured interviews
- ☐ Procedures involving physical experiments (e.g. exercise, reaction to computer images)
- ☐ Procedures involving administration of substances (e.g. drugs, alcohol, food)
- ☐ Physical examination of participants (e.g. blood pressure and heart and temperature monitoring)
- ☐ Collection of body tissues or fluid samples
- ☐ Other (please specify) _____

On an attachment, please indicate how any ethical issues concerning the design and/or implementation of methods will be addressed by the researcher(s).

SECTION B: PARTICIPANTS

7 WHAT ARE THE EXPECTED AGES OF YOUR PARTICIPANTS?

- ☐ Children (under 14)
- ☐ Young people (14-18)
- ☒ Adults (over 18 including College/University students)

8 WILL THIS PROJECT REQUIRE APPROVAL FOR ACCESS TO THE PARTICIPANTS FROM OTHER INDIVIDUALS OR BODIES?

E.g., parents, guardians, school principals, teachers, boards, responsible authorities, etc.?

YES ☒

NO ☐

On an attachment, please indicate how consent will be negotiated with participants in your project (including parental/guardian consent for children and young people) and indicate how any issues concerning that consent will be addressed (particularly where 'control' groups are being used or for College/University students).

SECTION C: ANONYMITY OF PARTICIPANTS

9 HOW WILL YOU ENSURE THE ANONYMITY OF PARTICIPANTS, CONFIDENTIALITY OF DATA AND RELATED ISSUES?

YES NO

- ☒ ☐ Will anonymity of participants be guaranteed?
- ☒ ☐ Will records remain confidential and access to data be restricted?
- ☒ ☐ Are participants able to withdraw from the project at any time?
- ☒ ☐ Are participants fully aware of the College's complaints procedure should they have any concerns regarding the researcher or the project?

Please attach a copy of your consent form that demonstrates how the issues identified above are being dealt with in your study.

If you answered no to any of the above, please provide additional information that explains why these procedures are not being followed and how potential risks to participants will be minimised.

SECTION D: POTENTIAL RISKS

10 ARE THERE ANY FORSEEABLE RISKS TO THE PARTICIPANTS?

(Please tick more than one box if needed).

- | YES | NO | |
|--------------------------|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Social risks |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Legal risks |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Psychological risks |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Health and safety risks |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Cultural risks |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Any other risks |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Are there any other ethical issues? |

If you answered yes to any of the above, please provide additional information that explains the nature of the risk and how it will be minimised. **NOW PLEASE SIGN DECLARATION SECTION E 2**

SECTION E 1: DECLARATIONS - All applications must be accompanied with a signed and stamped declaration of approval

AS I TICKED 'YES' IN Q1, I AM APPLYING FOR ETHICAL CLEARANCE AS MY RESEARCH PROJECT IS EXEMPT FOR ONE OF THE FOLLOWING REASONS (Please tick one of the following exemptions then sign the declaration)

- ☐ A project that involves data collection through investigation into human participants or animal subjects, and it is intended for possible public sharing.
- ☐ A project that involves the analysis of only data or information that is publicly available.
- ☐ A project that involves only further analysis of existing data (for which ethical clearance has already been obtained).
- ☐ A project that involves the writing up of previous research (with previous ethical clearance).
- ☐ A project that involves curriculum development but no data collection through investigation into human participants or animal subjects.
- ☐ A project that would be best described as improvement of classroom practice, and that will not involve the publication in any way of data obtained through investigation into human participants.
- ☐ Other (please specify) _____

I have read the *Guidelines for Ethical Clearance/Approval* and am aware of the implications of my research project.

The project has been accurately described in this application.

I undertake to reapply should circumstances relevant to this application change.

Signed: Date:
Principal Researcher

I am fully informed of the research proposal and am satisfied that it meets necessary standards in relation to ethical issues.

Signed: Date:
Academic Supervisor (for students)

OR

SECTION 2: DECLARATION

AS I TICKED 'NO' IN Q1, I AM APPLYING FOR ETHICAL APPROVAL FOR THE RESEARCH PROJECT AS OUTLINED ABOVE.

I have read the *Guidelines for Ethical Clearance/Approval* and am aware of the implications of my research project.

The project has been accurately described in this application and I have included all the necessary documents and attachments to support my application.

I undertake to reapply should circumstances relevant to this application change.

Signed: *Julie Foster* Date: *14/4/02*
Principal Researcher

I am fully informed of the research proposal and am satisfied that it meets necessary standards in relation to ethical issues.

Signed: *Home* Date: *8/8/02*
Academic Supervisor (for students)

NOTE: 75% of all applications will be audited by the Ethical Clearance Committee in a given year.

OFFICE USE ONLY

Project approved/rejected:

Approved/Rejected:

Comments:

Signature/Date:

Choice of Research Method

The **semi-structured interview** conducted face to face is the main method selected for primary data collection.

Related ethical issues to be addressed:

- Guaranteed anonymity of participants and their related schools.
- Confidentiality of information collected
- Consent for publication of project results
- The right for participants to withdraw at any time
- Credibility of research

Dealing with the above ethical issues:

The informants to participate in the semi-structured interviews will be purposefully selected using the following selection criteria. The subjects chosen must:

- be currently teaching Year 11 geography
- involved in the implementation of Level 1 Achievement Standards for NCEA
- selected from different types of schools (e.g. single sex / coeducational and urban / rural) to enable the possibility of varying perspectives to emerge
- have varying prior experience in the use of standards based assessment.

Providers selected on the basis of the above criteria will be sent letters explaining the nature of the research being undertaken along with advance copies of the broad questions that the semi-structured interview would focus on.

A consent form attached to each letter will seek 1) the willingness of participants to be interviewed 2) permission to audio tape the interview and 3) consent for publication of project results. The letter will also explain confidentiality regarding responses to ensure that neither the respondents nor their schools would be specifically named and the right to withdraw at any time. Possible dates for interview times will be indicated and a place for the participants to name their preferred choice of location for the interview provided. Contact address and contact for further information or concerns to be provided.

Refer to copy of the letter attached and written consent form to be signed and returned by all participants Appendix 1.

Peers on the National Geography Assessment Panel and the regional geography advisor will be asked to critique a draft copy of the letter, including the focus questions, prior to posting to ensure credibility. Contact address and a contact for further information or concern provided.

In terms of confidentiality these informants will be referred to by non-deplumes and /or teacher designations (e.g. HOD or assistant teacher). School names will not be specifically referred to.

Prior to each interview a statement assuring the confidentiality of the interview, and double checking permission was gained to have the interview audio taped will be provided.

Soon after the interview, typed transcripts of the tapes will be returned to each participant for their comments. Transcripts will be kept confidential to researcher and tapes wiped.

Appendix 3 Letter Granting Ethical Approval



20 August 2002

Murray Fastier
School of Secondary Teacher Education
Christchurch College of Education
Christchurch

Dear Murray

Your application for the project "The Implementation of the Level 1 Geography Achievements Standards in the New Zealand Secondary School Context: Geography Teachers' Perceptions" has been granted approval by the Ethical Clearance Committee.

You are required to reapply for clearance/approval should circumstances relevant to this current application change.

Yours sincerely

A handwritten signature in black ink, appearing to read 'R Townshend'.

Regina Townshend
Executive Officer – Research
Associate Principal's Office
Christchurch College of Education

Cc Dr Janinka Greenwood

Appendix 4 Application for Appointment of Supervisors



Christchurch College of Education MTchLn Research Project or Thesis



Application for Appointment of Supervisors

To be completed by student in discussion with the MTchLn Research Coordinator

Researcher's name John MURRAY LANG FASTIER

Researcher's contact address c/- Christchurch College of Education
PO Box 31-065 CHRISTCHURCH 8030

Phone 03 348 2059 extn 8457 Fax 03 343 7784

Email murray.fastier@cce.ac.nz

(tick one)

Course: ☐ TL802 (Project) ☐ TL803 (Project) ☐ TL804 (Thesis) ☒ TL 805 (Thesis)

Research Topic (Brief description of proposed research) To examine geography teacher
perspectives re the implementation of the Level 1 Geography
Achievement Standards using a semi structured interview protocol

Signed (student) John Fastier Date _____

Proposed Supervisors NB One must be a member of College staff. Two supervisors for Theses and either one or two for Projects.

Name and Contact (institution, phone and e-mail) Lindsey Conner, Christchurch College of Edn.
348 2059 extn 8463, lindsey.conner@cce.ac.nz

Name and Contact (institution, phone and e-mail) Roger Baldwin, Christchurch College of Edn.
349 5731, roger.baldwin@cce.ac.nz

This section to be completed by MTchLn Research Coordinator

Supervisors: ☐ confirmed ☐ not confirmed (Tick one. Comment below if not approved)

Name and load _____

Name and load _____

Signed (Research Coordinator) _____ Date _____

Comment

Appendix 5 Letter granting Academic Approval



15 July, 2002

Murray Fastier
Christchurch College of Education
Christchurch

Dear Murray

Re: Academic Approval for Research Proposal TL805

The MTchLn Academic Standards Committee has considered your application for appointment of your supervisors. I am pleased to advise you that approval was given at the meeting on 15 July 2002 for Lindsey Conner and Roger Baldwin.

You are now free to proceed with the next step in your thesis.

Best wishes

A handwritten signature in cursive script that reads 'Carol Mutch'.

Carol Mutch
Coordinator MTchLn Centre

Appendix 6a Typical Year 11 Assessment Programme used in training 2001
HIGH SCHOOL GEOGRAPHY DEPARTMENT
YEAR 11 GEOGRAPHY ASSESSMENT PROGRAMME

TERM ONE

Week 1	2	3	4	5	6	7	8	9	10
Intro to Geography		Extreme Nat. Events – Earthquakes		End of Topic Test Formative Assess: 1.1		Fieldtrip & Geog Research		Summative Assess 1.5	
								Extreme Natural Events	
								Tropical Cyclones	

TERM TWO

Week 1	2	3	4	5	6	7	8	9	10
Tropical Cyclones		End of Topic Test Formative Assess: 1.1		Geog. Issue Investigation 1.6 Sum. Assess.		Resources – Coal Mining		Mid Year Exam Form. Assess 1.1,4	
								Resources – Coal Mining & Dairy Farming	

TERM THREE

Week 1	2	3	4	5	6	7	8	9	10
Resources		End of Topic Test Formative Assess: 1.3		Global Study Olympic Games 1.7 Summative Assessment		Population – New Zealand		End of Topic Test Formative Assess: 1.2	
								1.7 Sum. Re-asses	
								Pop. – M.A	

TERM FOUR

Week 1	2	3	4	5	6	7	8	9	10
Pop M.A	End of Year Exam Formative 1.1 2 3 4	Population – Monsoon Asia End of Topic Test Formative Assess: 1.2			Revision	External Exams Summative assessment 1.1,1.2,1.3,1.4			
1.6 Sum. Reasses									

Appendix 6b Example of a Year 11 Assessment Programme used in 2003
High School Geography Programme Year 2003

TERM ONE										
Week 1	2	3	4	5	6	7	8	9	10	
Introduction to Geography. Getting to know skills and ideas – 1.4 External formative test Fri				Introduction to Resources 1.3 (Mining and dairying) and Inquiry field Trip 1.5		Coal Mining part of PCT 1.3 plus group work involving practice and preparation for inquiry based field trip 1.5				
				Fri: Test 1.4						
TERM TWO										
Week 1	2	3	4	5	6	7	8	9	10	
Field trip to W. Coast and follow up. Summative Inquiry 1.5 due on Fri		Teaching Dairying topic. Formative PCT test Fri 1.3		Global population Issue Too many for this world. Global Summative 1.7 (What Santa sees at night)		Local Issue NZ Population Change		Local Issue Our aging population		Global Issue Population control policies
TERM THREE										
Week 1	2	3	4	5	6	7	8	9	10	
Phillipine focus video Summative Issue 1.4		Introduction to Natural Events PCT 1.1. and part 1 Earthquakes in New Zealand								
						School Preparation Exams Practice assessment 1.1, 1.3 and 1.4		Review of exams		Introduction to S W Pacific
TERM FOUR										
Week 1	2	3	4	5	6	7	8	9	10	
Study of Part 2 of PCT 1.1 Tropical cyclones in the SW Pacific		Test of AS 1.1 External exam revision of 1.1, 1.3 and 1.4		External Exams Summative 1.1, 1.3 and 1.4 (NB school opted not to offer AS 1.2 on population studies)						

Only 3 summative internal assessments offered (no formal formative or reassessments offered). External AS 1.2 Population Studies not offered.

Appendix 7 Implementation Questionnaire

(Sent out with NZBOGT 2002 Exam Survey in February 2003)

Implementation of the Level 1 Geography Achievement Standards

Departmental feed back on the following questions would also be appreciated.

NB the following questions relate to all of the level 1 achievement standards (internal and external).

- How challenging did the geography department find the implementation NCEA related assessment changes during 2002?
- What NCEA support systems were
 - a) most valuable?
 - b) least valuable?
- How readily understood are the geography achievement standard criteria for teachers and pupils?
- What obstacles / concerns have hindered the implementation process?
- What major changes, if any, have you made to your Year 11 geography teaching programme or intend making in 2003?
- Are you going to offer all the level 1 Achievement Standards at each level in 2003?
If not, which one(s) are **not** going to be offer?
- What type of assistance (including by the NZGBOT) would be most beneficial in 2003 re geography achievement standards implementation?

Thank you for your co-operation.

Appendix 8 Definition of Assessment Terms

Standards-based assessment

measures the performance of a student against preset standards of achievement or competence. The performance of other learners does not affect the assessment of the individual. The students are not in competition for limited grades or pass rates. All students have the potential to achieve the standards. Evidence can come from a variety of sources. Results are reported as written statements that concisely describe what it is the student has been able to do. These contribute to a record of learning that profiles the skills and knowledge each student has achieved.

Two different types of standards-based assessment referred to are 'competency-based' assessment and assessment against 'achievement standards'.

Competency based assessment

measures the student's skills and knowledge against preset standards. There are no grades. The student either meets or does not meet the standard. This form of assessment is used to assess against unit standards.

Achievement standard

assessment that specifies not only the preset standard for the student to achieve credit (towards the NCEA qualification) but also specifies the standards for two levels above achievement that a student may achieve called 'merit' and 'excellence'.

The definitions, which follow, are consistent with those used by the Ministry of Education (1994) and *The NCEA Regional Facilitator's Guide* (2000).

Assessment Terminology for NCEA

Achievement Standard	Specifies the assessment requirements for credit towards a national qualification.
Assessment	The collection and evaluation of evidence of student performance.
Assessment Activity	Activity provided to enable students to present evidence for assessment against the standard.
Assessment Criteria	Provide guidance to assessors and students as to the type and level of performance required for each grade.
Assessment Schedule	Designed to achieve consistency of judgement between different assessors. Provides guidance on the minimum evidence, and

quality of evidence, required for each grade. It is specific to a particular activity and reflects what is in the achievement standard.

Authenticity	Ensuring the evidence presented is the student's own work.
Benchmarks	Samples of student work that signify the standard of evidence required for particular grades to be awarded. They relate to a particular assessment activity and support judgements made in the assessment schedule.
Explanatory Notes	Provide clarification and/or expansion of requirements for the standard. They refer to the relevant part of the syllabus (in the case of geography), and detail the content and contexts that can be used.
External Assessment	Work is assessed by 'marker' from outside the school. (In the case of geography this will occur by an end of year external examination.)
Formative Assessment	Assessment used to determine ongoing teaching and learning needs of students.
Internal Assessment	Work is assessed by classroom teacher (subject to national quality checks).
Management of National Assessment	Its purpose is to ensure national consistency of assessor judgement. The process is administered by NZQA and checks the assessment procedures of a school, and the assessment judgements of a department.
NCEA	National Certificate of Educational Achievement. To become the main qualification for senior secondary students. Will complement external exams with internal assessment.
Standards Based Assessment	A process by which evidence of achievement is judged against standards.
Summative Assessment	Assessment that takes place at the end of learning and contributes to an overall judgement of student performance.

(2) Assessment terminology for level one geography achievement standards
(NB: Terms included here are generic. Definitions of terms relating to a specific achievement standard can be found in the explanatory notes of the relevant standard.)

Comprehensively	Relates to depth <u>and</u> breadth of answer, which can be quantitative or qualitative.
Describe	Set out the characteristics of something. A description may be (but is not confined to) a list, statement, map, graph.
Detail	Relates to depth <u>or</u> breadth of answer, which can be quantitative or qualitative.

Examine	May include describe, explain, outline, inspect and identify, and is inclusive of what, where, why and how questions.
Maori Concepts	These relate to a particular achievement standard and are listed in the explanatory notes of each standard. Definitions are provided in the Glossary of Maori Terms which accompanies the Achievement Standards. Teachers are encouraged to incorporate appropriate concepts into their teaching of the particular topic.
Perspectives	In this context ‘perspectives’ relate to particular bodies of thought or sets of organised ideas about the world that have built up over decades or even centuries. Perspectives that relate to each achievement standard are outlined in the explanatory notes. An explanation of each is found in the ‘Statement on Perspectives’ that accompanies the standards.

Appendix 9



National Certificate of Educational Achievement
TAUMATA MĀTAURANGA Ā-MOTU KUA TAEA

Geography/Mātauranga matawhenua

This resource should be read in association with the Achievement Standards for this subject.

GLOSSARY OF MĀORI TERMS

Please note that this glossary has been compiled so that it is especially of assistance in the application of these concepts and terms to geography. This is not a definitive compilation of the full range of meanings that may apply to these concepts and terms.

Aroha	<i>love and empathy.</i> It is an attitude and an important cultural value of Māori, derived from a particular Māori view of the natural world and the place of Māori within it. Aroha is an important concept that underpins a Māori environmental management system.
Hekenga	<i>migration</i> occurs to meet the needs of Māori at any one time and in response to outside forces.
Iwi	a <i>tribe</i> who has particular geographical boundaries outlining the region in which they have mana whenua status
Kaitiakitanga	to “ <i>care for</i> ” the environment. It is the sustainable use, management and control of natural and physical resources that are carried out to the mutual benefit of people and resources.
Karakia	<i>incantations</i> or <i>prayers</i> for a specific purpose, such as lifting the tapu off an area of land in order that it may be cultivated.
Koha	the concept of koha is related to manaakitanga and the appropriate acknowledgement of <i>sharing hospitality and/or information</i> . Koha may take the form of food, gifts or more recently money.
Kōrero pūrākau	a <i>legend or story</i> that explains an event or activity.
Mana whenua	the <i>right to use, manage and control land</i> depends on the protection of mana whenua. Mana whenua is based on Ahikā (Iwi maintaining residence in a particular place) and is an important part of tino rangatiratanga (self-determination).

Mana	derived from spirituality, land and ancestral linkages of a person, of people or a taonga and manifests itself as the <i>respect, which is paid to that person, those people or that taonga as a result of the esteem accorded by others</i> . The practice of kaitiakitanga is carried out by Iwi and hapū, through exercising Iwi and hapū Mana, which is embodied in the concept of Tino Rangatiratanga.
Manaakitanga	is a concept that involves <i>hospitality and how visitors are cared for</i> . It is important that such hospitality is acknowledged and reciprocated.
Mihi	is a process of <i>formally acknowledging people</i> you meet, the purpose of the meeting, and the place (where the meeting is being held), through protocols set by the iwi.
Taonga	is <i>a resource either physical or cultural</i> that can be found in the environment (including features within the environment e.g. lakes, mountains, rivers, also including people, te reo, whakapapa, etc.).
Tapu/noa	is the state of being <i>sacred or special</i> . All taonga are tapu. The tapu of taonga needs to be removed temporarily in some cases before people can make use of, or tend them. Karakia are important for the removal of tapu and rendering the taonga noa (<i>free of tapu, contactable or useable</i>).
Tikanga Māori	the <i>customs and traditions Māori live by</i> and practise within the environment.
Tino Rangatiratanga	includes the <i>rights, responsibilities and obligations involving the use, management and control of the land and other resources</i> .
Waiata tawhito	a <i>song or chant</i> that has been passed down through generations within iwi. It may include information that explains events relating to the environment.
Whakanohonoho	Māori <i>settlement</i> was chiefly governed by access to resources.
Whakapapa	the <i>genealogy</i> of a taonga or person (ancestral and/or historical) with linkages to other taonga or persons.
Whanaungatanga	Māori share a <i>common whakapapa with other people/taonga and therefore a strong sense of responsibility and reciprocal obligations toward those people/taonga</i> . This forms an important part of a holistic world-view. All taonga are interrelated, interconnected and interdependent. The life force (mauri) of taonga must be protected. The sustainable management of taonga is therefore paramount to our survival.

Appendix 10



National Certificate of Educational Achievement
TAUMATA MĀTAURANGA Ā-MOTU KUA TAEĀ

Geography/Mātauranga Matawhenua

This resource should be read in association with the Achievement Standards for this subject.

STATEMENT ON PERSPECTIVES

What is a perspective?

Part of the problem with the concept of ‘perspectives’ is that the word is used in a number of loose ways in different contexts. In teaching geography to students in secondary schools we are particularly interested in differentiating between different ‘theoretical’ perspectives. That is, we want students to know about how knowledge about the world is organised and understood from different points of view. In other words, we are keen to find out whether different ways of looking at things, thinking about things, talking about things and organising our understanding of things affects **what we can know** about things. In essence, if we have a different ‘perspective’, do we have a different but equally ‘true’ version of events?

Particular bodies of thought or sets of organised ideas provide us with ‘perspectives’. These are not any one person’s views but an aggregate of ideas that has been built up over decades or even centuries. At some point in time, it is possible to see that a particular set of ideas tends to always take us in a particular direction, tends to always build on the same foundational ideas and tends to require us to think in particular kinds of ways. Once a knowledge framework has developed this kind of stature, scientists and social scientists tend to talk about the framework as a ‘theoretical perspective’.

It has been the tradition of western European thought to organise ‘mind-sets’ into ‘knowledge disciplines’. This tendency to organise knowledge into disciplinary frameworks is, in fact, one of the particular mind-sets of western/European thought.

Dominant knowledge / hegemonic perspectives

Geography is a ‘discipline’ or a body of knowledge that has been organised around a set of ideas that provide boundaries for the discipline. Two of the core organising ideas of the discipline of geography are that it is to do with ‘people and the environment’ and ‘spatial relationships’. In schools and universities, geography is a ‘subject’ that students can ‘take’ in order to ‘become geographers’, just as other students might ‘take maths’ in order to become mathematicians, or economics to become economists or science to become scientists... and so on.

Our particular perceptions of what economists, scientists or geographers ‘do’ is conditioned largely by what we understand their subject ‘discipline’ to be ‘about’. Our individual perceptions about the discipline, the subject matter, the subject or the practitioners, may be coloured by our incomplete knowledge, stereotypes, personal experience and so on. We do not often get the

opportunity to sit back and think about the mind-sets or theoretical perspectives that inform these disciplines or to think about the key philosophers whose ideas shaped these perspectives in compelling ways.

‘Scientific analysis’ or ‘science’, in western thought, is a dominant way of thinking – so much so that it is often assumed to be the only ‘valid’ way of thinking. It can thus be described as hegemonic. Scientific knowledge is valued, has particular currency, is influential and is believed to be ‘truth’. Western scientific knowledge has been built up over centuries but acquired its ‘truth status’ during the period of the European ‘enlightenment’ when the idea of ‘scientific proof’ became widely accepted.

Retrospectively, this particular theoretical perspective (the mind-set that values information that has been proven by set ‘scientific’ procedure) has been labelled ‘positivism’, ‘empiricism’ or scientific rationalism.

Positivism, empiricism, scientific rationalism

In this world-view, knowledge or truth is universal, ideas that can be verified empirically assume the status of ‘laws’ (of nature, of science), and ‘fact’ can be distinguished from ‘fiction’. Generalisations are widely accepted to apply to all (or at least nearly all) circumstances. The so-called ‘scientific method’ is based on the verification of factual statements or hypotheses through empirical data testing. Much if not all of the current geography found in textbooks in New Zealand high schools belongs to this traditional perspective.

Students, for example, are encouraged to learn about different parts, or regions of the world: New Zealand, South West Pacific, and ‘continental’ land areas such as Africa or South America. They are encouraged to focus on ‘natural’ and ‘cultural’ landscapes and processes (*Syllabus for Schools Geography Forms 5-7* 1990, 26-29). In order for students to learn about:

- how many and what kinds of people, animals and plants live in certain places,
- what kinds of products and resources are used and in what ways,
- what physical and cultural features characterise some areas and not others,

a wide range of empirical data must be collected and presented to the students.

We, geography teachers, take that information for granted. We use it to give the students some kind of leverage for understanding the ‘processes’ that are taking place. We use it so they can identify the ‘spatial variation’ between one phenomenon and the next. We use it as the foundation for explaining important geographical ideas like ‘location, distance, accessibility’ and ‘patterns, processes, regions, and ‘interaction’, ‘systems’ and change’. We even use that empirical data to identify aspects of ‘culture and perception’. Teachers and resource makers provide students with arrays of data or ideas of ways to access data and students are then encouraged to learn and interpret this information in a range of ways. “Here’s the facts – tell us what you think it all means”.

We tend not to ask the questions about “how was this data produced, who by and for what purpose?” We tend not to ask “is this information true?” We tend to think about what is in the text rather than what is NOT in the text. We tend to accept all the categories and classifications for things and not question how all the categories and classifications were ‘invented’ and who by and for what purpose. We tend not to ask the students to think about the KIND of knowledge they are dealing with.

Different theoretical perspectives give us the capacity to critique and challenge these taken-for-granted ways of understanding the world. New perspectives give us the opportunity: to ask hard

questions about the information we are dealing with in geography, to wonder whether or not there are other ways to represent information and ideas, to encourage school students to think very differently about the world that they are part of.

Questioning foundational knowledge is not every body's cup of tea – nor is it easy. Fortunately, as with dominant perspectives, there are groups of thinkers and philosophers who have been building up their own 'counter-hegemonic' or 'critical' world-views. There is now some kind of consensus – at least in western intellectual thought – about other theoretical perspectives.

Different perspectives

The purpose of introducing the term of 'perspectives' into the Achievement Standards is to encourage greater diversity in the approaches to and representation of the knowledge, values and attitudes to which students are exposed. Different ways of thinking about the world and different ways of organising knowledge for students have new labels such as 'gender geography' 'feminist geography', 'new cultural geography', 'post-modern geography', 'socially critical approaches', and 'Māori Geography' – but these are not the only ones.

Appendix 11

Frequently Used Abbreviations

ABA	Achievement Based Assessment
AGTA	Auckland Geography Teachers Association
AS	Achievement Standards
CGTA	Canterbury Geography Teachers' Association
ERO	Education Review Office
MoE	Ministry of Education
NCEA	National Certificate of Educational Achievement
NQF	National Qualifications Framework
NZBoGT	New Zealand Board of Geography Teachers
NZQA	New Zealand Qualifications Authority
PCT	Prescribed Common Topics
PPTA	Post Primary Teachers' Association
PJ	Professional Judgment
SC	School Certificate
SSS	School Selected Study
SQA	Scottish Qualifications Authority
TKI	Te Kete Ipurangi
VCE	Victorian Certificate of Education

Extended Abstract

Implementing Level 1 NCEA Geography Perceived Challenges, Obstacles and Support Systems

By John Murray Lang Fastier

**A draft journal article, submitted in partial fulfilment
for the degree of Master of Teacher and Learning.**

**Christchurch College of Education
September 2006**

Implementing Level 1 NCEA Geography Perceived Challenges, Obstacles and Support Systems

Murray Fastier

School of Secondary Teacher Education, Christchurch College of Education,

P.O. Box 31065, Christchurch.

E-mail: murray.fastier@cce.ac.nz

Note about the author:

Murray Fastier is a Principal Lecturer at the Christchurch College of Education. Murray's involvement with secondary school geography assessment change nationally, extends over two decades.

Abstract:

The National Certificate of Educational Achievement (NCEA) is the recently introduced national qualification for New Zealand senior secondary school students. Based on a mix of internal and external assessment against achievement standards, it represents a marked change from the previous norm-reference based qualifications. Introduced in 2002, commencing with Level 1, NCEA involved a considerable paradigm shift in assessment practice for teachers. This paper focuses on teachers' perceptions regarding the process of implementing the Level 1 geography NCEA achievement standards. It highlights the initial challenges faced, factors considered to assist and hinder the implementation change process and the lessons learnt.

Key words:

achievement standards, assessment, geography, National Certificate of Educational Achievement.

Publication Note:

This is a draft copy of a paper to be submitted to the *New Zealand Geographer*.

Short Title:

Implementing Level 1 NCEA Geography

Background

The implementation of the National Certificate of Educational Achievement (NCEA) in 2002, witnessed every senior secondary student in New Zealand studying towards one single coherent qualification. As such, NCEA was seen as putting an end to the considerable debate taking place in New Zealand throughout the 1980s and 1990s regarding the suitability of school qualifications based around the traditional norm-referenced and the more recently introduced unit standard based assessment systems. The NCEA initiative, according to the then Minister of Education, The Hon. Wyatt Creech (1998), involved a compromise between unit standards and the status quo, blending the best of the old and the new assessment systems, and replacing the associated problem of having a dual qualification system in operation at the senior school level.

The NCEA qualification is credit based, allowing senior students to accumulate credits in order to gain the NCEA at levels one to three of the National Qualifications Framework (NQF). For all conventional school curriculum subjects, a mix of internal and external assessment against 'Achievement Standards' is used to generate credit. These achievement standards help set in place the required standard for students to gain credit, and in addition allow for the recognition of merit and excellence grades to be awarded above the achievement level. Further background relating to the nature and evolution of the NCEA and the related achievement standards is outlined by Fastier (2001).

Setting the scene

The introduction of Level 1 NCEA in 2002 signalled a major change in the assessment approach used by New Zealand schools for national qualifications at the senior level. Its implementation required a considerable mind shift in assessment practice for teachers, particularly for those with no previous experience in the use of standards based assessment. The achievement standards required changes not only to the way assessment evidence is gathered and judged in relation to student work but also to the way recording and reporting of achievement is conducted. To help prepare teachers for this paradigm shift, all secondary school teachers received generic and subject specific professional development leading up to 2002. This included NCEA related workshops facilitated by the Ministry of Education (MoE), monthly NCEA Update newsletters, access to achievement standard-based assessment resources on the MoE's Te Kite Ipurangi (TKI) website and New Zealand Qualifications Authority (NZQA) website and to the NZQA 0800 Helpline. Even with such support systems in place, it was anticipated that teacher workload would increase at least in the short term, and that new assessment challenges would be faced.

The Study

The above scenario provided the motivation for this research, investigating geography teachers' perceptions regarding the implementation Level 1 NCEA geography achievement standards. A qualitative research design was employed, using semi-structured interviews with geography teachers from six case study schools. This research methodology was considered the most appropriate for encouraging the participants to talk openly about their NCEA implementation experiences using their own language and meaning constructs. The semi-structured interviews were conducted towards the end of both 2002 and 2003. The case participants were purposefully selected. The teachers were trained geographers. Equal numbers of females and males were chosen. The sample selected reflected a range in relation to both teaching experience, and previous exposure to standards based assessment. All but one of the participants was a head of department. School sizes varied and included state, private, integrated, co-educational and single sex type schools. All schools were city based, apart from one that could be described as semi-rural, and were located in and around the greater Christchurch area.

The key research questions investigated in 2002 were:

- How are geography teachers making sense of implementing the NCEA related assessment changes at Year 11?
- What is helping / hindering the implementation process?
- What impact is NCEA related assessment having on Year 11 geography teaching and learning programmes?

In 2003 the key research questions were extended to include:

- How did geography teachers perceive the 2002 externally assessed examinations and related examiners reports?
- What changes, if any, are geography teachers employing to make NCEA related assessment at Year 11 more manageable?

The data collected from each of the semi-structured interviews was systematically analysed and coded to enable similar and unique viewpoints to emerge. Document analysis of Year 11 assessment programmes for 2002 and 2003, provided by the participants, was also carried out to help add to the meanings emerging from the interview transcripts. The focus of this particular paper is on the first two research questions used in 2002. A second paper is proposed regarding the impacts of NCEA on teaching and learning, and the strategies used by the geography teachers surveyed to make NCEA assessment more manageable.

The study aim was to gain a snapshot of Year 11 geography teachers' perceptions of NCEA implementation. Despite limitations, especially sample size, the research findings do shed light on the assessment implementation experiences of six case study geography departments. Their individualised accounts add to our wider conceptual understanding regarding the subtleties and complexities of implementing assessment change. In regards to external validity, there was no intention to generalise the findings emerging from this study. Peoples' perspectives and interpretations of aspects of the NCEA implementation are expected to be different. The research findings, for discussion purposes, are however compared with findings from other relevant reports written by organisations such as the Education Review Office (ERO), the Post Primary Teachers' Association (PPTA), New Zealand Board of Geography Teachers (NZBoGT) and the Alison (2005) paper Teachers talk about NCEA.

Overview

The overall findings regarding implementation of Level 1 NCEA geography based on the experiences of the participants surveyed during 2002 and 2003, revealed a two-stage process in operation. Stage one prior to and during 2002, involved making the paradigm shift to standards-based assessment and in many respects was akin to a trial. The focus of the six departments at this stage was perceived simply as getting Level 1 NCEA geography and related achievement standards up and running. Although all six geography departments managed to achieve this objective, it was in a format they came to recognise by the end of 2002 as being unsustainable long term, in regards to teacher workloads and excessive use of assessment. Stage two commencing in 2003, involved modifying NCEA related geography assessment practice in light of the 2002 implementation experience. The focus of the departments at this stage was to make Level 1 NCEA geography assessment more manageable in terms of workload and less dominating in relation to classroom teaching and learning.

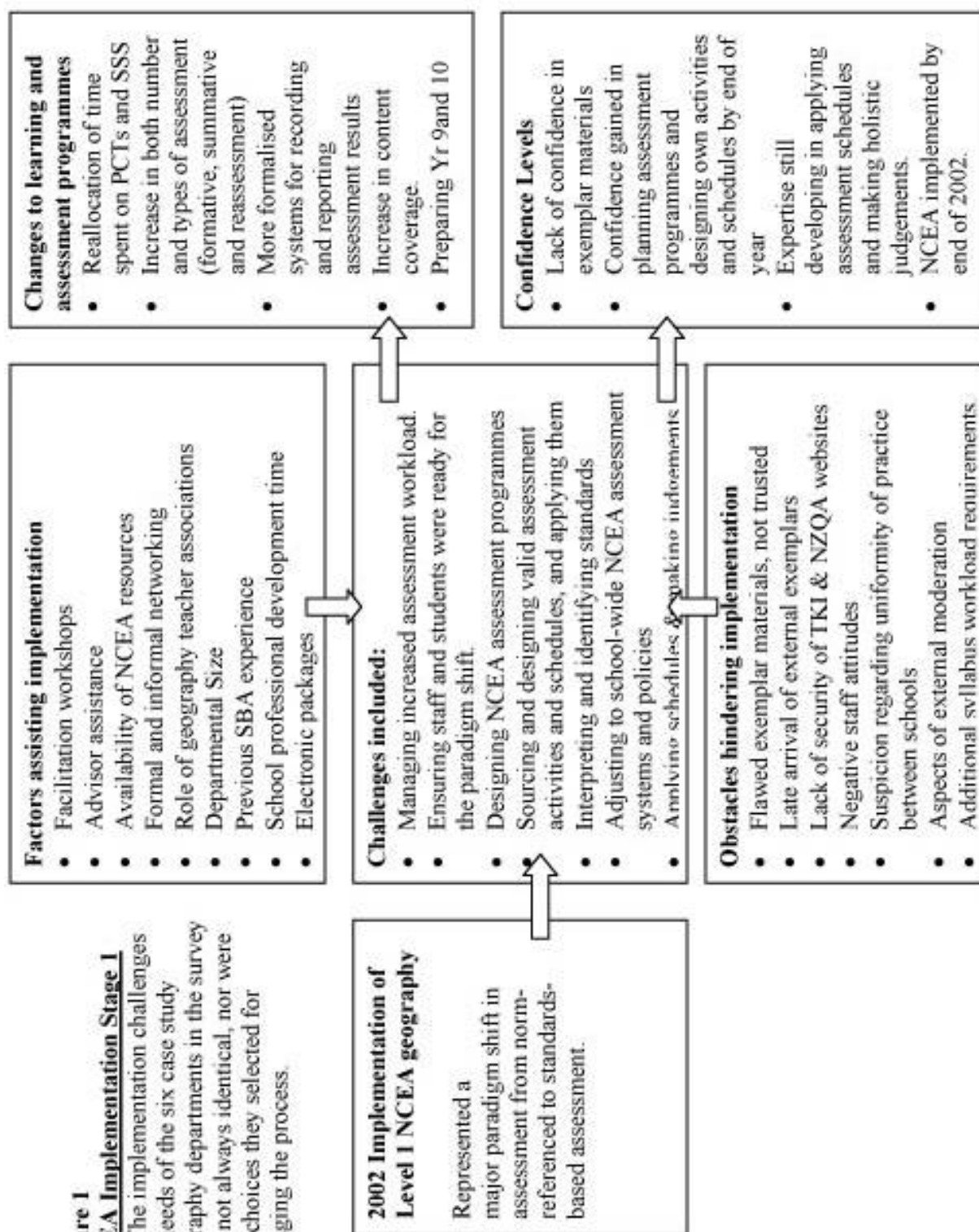
Discussion of Findings

The discussion of these findings is organised under the three themes: Challenges Faced, Factors Assisting Implementation and Obstacles Hindering Implementation. This is followed by a Conclusion based on the insights learnt.

A. Challenges Faced

Challenges identified by the interviewees in 'stage one' are summarized in Figure 1.

Figure 1
NCEA Implementation Stage 1
 NB The implementation challenges and needs of the six case study geography departments in the survey were not always identical, nor were their choices they selected for managing the process.



Increased Workload

Managing a significant increase in teacher workload was reported by all the interviewees as a major challenge. They openly acknowledged that this increase in workload was an expected consequence of NCEA for them, at least in the initial implementation phases. The key generators of the increased workload for the interviewees, in the lead up time and during 2002, included sourcing and designing sufficient valid assessment activities and schedules, planning and administering their NCEA related assessment programmes, interpreting the achievement standards, identifying the 'national standard', applying the assessment schedules, ensuring staff and students were adequately prepared for making the paradigm shift to standards-based assessment and adjusting to school wide NCEA assessment systems including internal and external moderation. While the above list of workload generators can be viewed as generic in nature, the geography interviewees perceived three additional factors that contributed significantly to their workloads.

The lack of high quality exemplars

The first factor was the lack of high quality geography assessment exemplar materials available on the TKI website, as promised by the MoE. The interviewees expressed real concerns regarding the variable quality and often flawed nature of the geography exemplars posted on this website. They expressed feelings of anxiety and frustration created by the extra workload that resulted, including a loss of confidence in the overall NCEA implementation process. The PPTA (2002) paper recognised and made specific mention of the MoE's substandard internal assessment exemplars occurring in geography.

The nature of the geography achievement standards

The second factor relates to the nature of the geography achievement standards themselves. Although based on the existing syllabus documentation, the Level 1 geography achievement standard writers incorporated a number of changes and additions, as proposed by the NZBOGT (1999) Position Paper, in an attempt to update the syllabus via the backdoor. While, the ERO (2004) publication reported that the majority of subject areas surveyed, found implementing NCEA to require minimal if any changes to be made to the curriculum, this did not appear to be the case in geography. The interviewees intimated that the geography achievement standards added to their already overcrowded geography Level 1 teaching programmes, requiring extra content coverage, additional perspectives, new terminology, and nineteen Maori concepts to be incorporated. These additional syllabus requirements not only increased their NCEA workloads but also added to the complexity level.

Assessment Programmes

The third contributing factor was a perceived need for assessment programmes to have available tasks and schedules for formal formative, summative and reassessment purposes for each of the internally assessed geography achievement standards (apart from the research standard geography 1.5, where a reassessment opportunity was not always possible due to time constraints). This notion disseminated to the interviewees during their 2001 NCEA Level 1 geography teacher workshops, impacted considerably on their assessment related workloads, in terms of both sourcing sufficient numbers of valid assessment activities and finding time to make all of these assessment opportunities available. When combined with each of the four externally assessed achievement standards, typically involving one formative end of unit type assessment and at least one formal revision type assessment, normally conducted in school practice examinations, meant geography assessment workloads loomed high.

The above situation was further compounded by a somewhat late indication made in May by NZQA (2002) that resubmission was admissible and could be utilized rather than reassessment where opportunities were appropriate. Resubmission had not been considered as an available option in any of the interviewees' school assessment policy guidelines for 2002 and therefore was not able to be utilized in the place of reassessment in their geography department assessment programmes. In the light of all of the factors discussed above it is understandable why the interviewees perceived their NCEA related geography assessment programmes to be creating far greater workload pressures than may have initially been anticipated.

Departmental Differences

Workload aside, the implementation of Level 1 NCEA geography required a significant paradigm shift in the way learning is assessed for both staff and students. The related challenges involved in making this transition, did not however apply uniformly across all six geography departments. Factors such as departmental size, level of staff teaching experience, including familiarity and use of other forms of standards based assessment were found to be important influencing factors. For example, the two larger geography departments surveyed with experienced staff, benefited from being able to delegate NCEA tasks, peer critique work and engage in debates within their own ranks. Congruously, the geography staff in the small or sole person departments found the NCEA implementation process more onerous, with fewer people to share the workload or to discuss and clarify ideas with.

Similarly, the three departments surveyed with prior experience in the use of geography unit standards and grade related criteria, indicated that being familiar and confident with these forms of standards-based assessment, helped make the transition or paradigm shift to NCEA related assessment smoother. In contrast, the geography departments surveyed where staff had either resisted, or had no opportunities to utilise other forms of standards based assessment, found making the same transition to be more demanding. These findings are consistent with those outlined in the Education Review Office (2004) report. The interviewees also revealed that the geography staff that had resisted implementing geography unit standards tended, at least initially, to be less accepting in attitude towards implementing NCEA. Likewise, interviewees revealed that the Year 9 and 10 students who had prior experience of working with achievement-based style assessment felt more comfortable in making the transition than those who had not.

Professional Judgements

In comparison with previous assessment systems, the NCEA achievement standards relied on teachers making more professional judgements. The interviewees found making these judgements challenging, especially during stage one. For the interviewees this challenge appeared to operate at three different levels, these being within schools, between schools and at a national level. Within schools the challenge involved differentiating between the grade boundaries (Non Achievement, Achievement, Achievement with Merit and Achievement with Excellence) particularly making the border line call between each of the grades. Between schools there was anxiety as to whether the so-called national standard was being applied in a consistent manner. Anxiety was expressed by interviewees that their school, was maybe setting a higher standard than that set by a school down the road or providing less reassessment opportunities. At the national level the interviewees experienced difficulty adjusting to marking at a seemingly lower standard, at the achievement level, than which they had become accustomed under the former School Certificate norm-referenced system. Interviewees also felt communication of the 'national standard' and the related concept of making 'holistic judgements', needed to be made more transparent during training workshops, in order to give them the self-confidence needed when designing and applying assessment schedules.

School wide NCEA related systems.

The final challenge acknowledged by the interviewees during stage one was the need to adjust to the school-wide (as opposed to departmental) NCEA related assessment systems. They found they needed to be a lot more formalised and structured in the way they complied with NCEA policies and procedures, such as authenticity, lateness, internal moderation of assessments,

verification of student results, reassessment opportunities and the like, than they had been previously. Getting the mechanics and logistics of such procedures set up, and ensuring all departmental members were compliant was perceived as the main challenge or adjustment needed to be made.

B. Factors Assisting Implementation

In addressing all of the challenges referred to above the interviewees identified several valuable support systems, as summarised in Figure 1.

Facilitation Workshops

The interviewees perceived the NCEA teacher training facilitation workshop days as being invaluable on two counts. The first was to provide a starting point for disseminating information on NCEA and achievement-standards-based assessment. The second count, and one not to be underestimated, was that the workshops provided a valuable forum for geography teachers to have the opportunity to plan collaboratively, to chat, to raise lots of questions, to share ideas and to informally begin networking with other colleagues. This finding was also found by the research of Alison (2005) and by Hipkins, Conner and Neill (2005). The geography interviewees really valued engaging in professional dialogue and developing and sharing ideas and resources. Unfortunately opportunities were not always sufficiently long enough at the training days or readily available within geography department meetings, due to time restrictions, for such dialogue to be as professionally productive as it could have been.

Networking

Professional dialogue and productivity arising from formal and informal networking between schools, where utilised, were also found to be professionally rewarding. Two of the interviewees, from the smaller schools, were part of a larger cluster of schools working collaboratively together to produce a practice exam package on CD Rom for Year 11 geography. They found having links beyond school, involving sharing and moderating each others work, helped improve their own assessment practice and level of expertise. The interviewee from the sole person geography department, who networked with two teachers from small rural schools, to jointly plan NCEA programmes and a shared field trip assessment, concurred. He was very positive regarding the spin offs gained through collaborative assessment planning, and gleaning ideas and wisdom from more experienced practitioners. The three other interviewees found networking in an informal manner with colleagues at other schools, either by phone or by email, to be

desirable. They found it both beneficial and reassuring to check on how NCEA progress was being made at other schools, as well as discussing related ideas and concerns.

Regional Advisors

The interviewees from the smaller geography departments also valued having the regional social science advisor available to provide additional guidance and support. They appreciated having an outsider with subject expertise giving advice and feedback regarding the appropriateness of their assessment activities and programmes as they were not always in a position to critique or internally moderate their own work.

Resource Materials

Having a range of NCEA geography resource materials available to assist implementation was also considered helpful by the interviewees. They felt both the MoE's TKI and the NZQA's NCEA websites provided useful reference points. However, genuine concerns were expressed about the variable quality and sufficiency of the resources provided on the TKI site. Several of the interviewees also purchased exemplar internal assessment activities provided by the Auckland Geography Teacher Association (AGTA), and exemplar external resources made available through the NZBoGT. While the above resources did not always suit the departmental needs directly, particularly in regards to settings, they found having them available on either the Internet or on CD Rom made them relatively easy to modify. The local Canterbury Geography Teachers' Association (CGTA) provided opportunities for the teachers to meet and discuss implementation of Level 1 NCEA, however some of the interviewees felt they could have been more proactive in making available assessment resources with a local or regional settings. This could have saved them the time taken to modify and tweak exemplars provided with a national or Auckland focus.

Skill of designing and modifying assessment materials

A positive spin-off, easily overlooked, resulting from the interviewees having a lack of confidence in the TKI exemplars, and related security issues, was that they became quite adept at modifying activities to suit their needs or designing their own activities. If the web exemplars had all been valid the interviewees may have been tempted to rely solely on these for assessment. A positive upshot however, despite the extra workload involved, was that all of the interviewees by the end of the 2002 expressed confidence in modifying and designing their own assessment activities and schedules. This skill, essential to the long-term implementation of NCEA, was

later recognised by the MoE who provided all teachers with a generic professional development workshop in standards-based assessment task design and adaptation in Term 2 of 2003.

Availability of planning time

The interviewees repeatedly reported that finding time, and sourcing and designing valid assessment activities as ongoing issues for the departments in the lead up time and during 2002. This was especially the situation in the smaller departments who all reported finding the implementation timeline too rushed. The in-school professional development days provided during 2001 were highly valued in this connection giving the geography departments' breathing space to help prepare. Other factors assisting implementation, already made reference to, were the benefits gained from having all or some of the following: large departments, experienced geography staff and familiarity with previous forms of standards-based assessment.

Professionalism

While the interviewees did acknowledge the implementation process as demanding, they seldom mentioned their own professionalism and high level of commitment demonstrated in making NCEA work. The interviewees' hard toil did appear, at least from the interviewer's perspective, to contribute a great deal in helping to make Level 1 NCEA geography successful for their students.

C. Obstacles Hindering Implementation

As well as factors assisting implementation the interviewees also referred to a number of obstacles hindering implementation. These are summarised in Figure 1. Suspicion regarding uniformity of practice between schools, negative staff attitudes, additional syllabus workloads and flawed exemplar material has already been referred to. The availability of quality-assured internal assessment exemplars on the TKI website as promised by the MoE, although mentioned, does however require further discussion.

Faulty exemplar materials

The TKI exemplars assessment activities and schedules were meant to reduce teacher workloads and assist teacher confidence levels leading into the implementation of NCEA. However, the appearance of variable quality and sometimes flawed geography exemplars appeared to have the reverse effect creating anxiety and frustration for the interviewees and considerably increasing their workloads.

Several reasons for the appearance of faulty exemplar materials have been referred to by both the PPTA (2002) and ACT New Zealand (2002). One being that the geography internal exemplars placed on TKI and also used for Level 1 training were based on the draft achievement standards and not the registered versions that had undergone further modifications. The registration unfortunately did not occur until 21 December 2001, long past the time the exemplar writers and teachers had prepared the bulk of their assessment materials. It was not however until June 2002 that teachers had it pointed out that several geography resources on the TKI website were in need of modification because of the variance above.

Another reason suggested for the low quality of the exemplar material was that they were written by busy teachers, withdrawn from schools for a few days, and asked to attempt the impossible. Regardless of the reasons, having exemplars on TKI that contained flaws that were later identified as not valid or valid only with modifications did not inspire confidence in the interviewees who had used or planned to use them, and led to a negative backlash, loss of faith in TKI and feelings of frustration and anxiety to be experienced. The availability of quality assured pre-moderated exemplars would have reduced the time teachers had to spend on sourcing new activities or modifying existing ones.

Another concern was the lack of security with exemplar material on both the TKI and NZQA websites. Interviewees gave examples of students accessing the activities and schedules on the websites creating issues of authenticity and fairness surrounding student work. This meant that the exemplars were not ideally suited for summative internal assessment purposes. Modifying these exemplars to address security and authenticity however, added further to interviewee workloads.

Late availability of external exemplars, examination schedules and examiner reports

Half of the interviewees expressed further frustration created by the late arrival (i.e. in term 3) of the external exemplars on the NZQA NCEA website. They had hoped these exemplars would have been available early in the year for reference and guidance purposes, or at least half way through the year for possible use in mid year practice exams. They also wanted more than one exemplar to be provided for each standard, to use in mid and end of year practice exams.

Research by ERO (2004) and Alison (2005) expressed similar teacher concerns regarding the initial paucity of external exemplars, and insufficient guidance about what to expect resulting from the delays in their availability. To some extent the geographers concern regarding having

more than one external exemplar was offset by the availability of the NZ BOGT Level 1 CD Rom containing sample external exemplars, or as mentioned earlier, schools forming cluster groups to develop their own external exemplar packages.

In 2003 the interviewees also expressed concern at the long delays in the availability of the 2002 examiners reports and schedules. These were not released until Term 3, too late to incorporate ideas and advice into topics already taught. The interviewees using the 2002 exam as the basis for their 2003 mid year practice exam also wanted access to the marking schedule for marking student scripts. The interviewees felt the examiners report should have been available by April at the latest in order to maximise teacher and learner benefits. The delays by NZQA in releasing critical information to the teachers were perceived by most of the interviewees as unacceptable.

Interpreting the Achievements

In terms of interpreting the achievement standards, the interviewees initially found understanding the terminology used in the Achievement Criteria and ambiguities within the special notes to be challenging. In the second round of interviews it should be noted that the teachers were positive about the changes proposed for the version two Level 1 geography achievement standards, which they perceived to be more user friendly in nature.

External Moderation

External moderation was another obstacle interviewees reported as hindering the implementation process. They expressed concerns during 2002 regarding long delay in receiving feedback, possibly due in part to NCEA stop work industrial action requested by PPTA. They found the lack of feedback or explanation as to why an activity or schedule was invalid to be most unhelpful. A lack of guidance provided on how to overcome moderation concerns was also perceived as unsatisfactory. While acknowledging that moderators needed time to learn their process, interviewees also raised concern about inconsistencies in moderator decision-making. Two interviewees were able to cite specific examples whereby schools had submitted identical work to different moderators but received markedly different decisions, bringing the credibility of the moderation system into question. ACT NZ (2002), ERO (2004) and Alison (2005) have all made similar comments about the external moderation system to those expressed above. On a positive side during 2003 the interviewees did report that moderators were generally being more constructive with their comments, and were indicating why an assessment activity or schedule was invalid or how a judgement made in assessing student work may have erred.

Making the final judgements

Although the interviewees indicated at the end of 2002 that they had been reasonably successful in implementing Level 1 NCEA geography and were far wiser after one years experience, they acknowledged to still feeling uneasy about applying the schedules to student work and making the final judgement calls. Alison (2005) acknowledged that making judgements especially at the grade boundaries was a big challenge for most teachers. She suggested this was because of the fairly generalised nature of the achievement standard descriptors and also the subtleties of the language involved. Black (2001) agrees with Alison and indicates that making holistic and complex judgements, calls for the greatest expertise in an area where teachers' experience is the weakest.

Longer lead in time

In reviewing the obstacles identified by the interviewees as hindering NCEA implementation, many relate back to issues where the two central agencies MOE and NZQA appear to have fallen short in aspects of delivering change management. Examples include the timing issues regarding the use of resubmission, the late registration of the final versions of the geography Level 1 achievement standards, the delayed notification to the teachers about internal exemplar activities on TKI being invalid or in need of modification, the prolonged delay in the release of markers reports and external examination marking schedules, and the unhelpful nature of the initial external moderators' feedback. Although the implementation of NCEA was delayed by a year, benefits in a longer delay may have enabled the central agencies to get some of these initial teething problems identified above resolved. A longer lead in time would also have given schools more planning time.

A longer lead in time would have enabled a pilot scheme to trial NCEA before its introduction, as happened in geography with the introduction of grade related criteria achievement-based assessment at Year 12 in the late 1980s and with the implementation of Unit Standards in the mid 1990s. The advantage of these trials is that they allowed for flaws to be identified before the new assessment systems were introduced nation wide. For example, with the geography unit standard trials held at the start of 1995, it quickly became obvious that having students required to achieve the standard in both prescribed common topic settings was entirely unrealistic and modifications were promptly put in place. Similarly, ambiguities the trial teachers found in applying the unit standards were ironed out and inconsistencies between the unit standards addressed prior to the teacher training and implementation phases, enhancing teacher confidence.

NZBoGT questionnaire findings

Strong parallels exist between the interviewees' perceptions of the NCEA implementation process as summarised in Figure 1 and feedback received from a questionnaire titled 'Implementation of the Level 1 Geography Achievement Standards' posted to schools with the NZBoGT's Geography Teacher Exam Survey in February 2003. The geography teachers responding to this questionnaire indicated they found the most challenging aspect of implementing NCEA in 2002 was the time and workload involved. The three most valuable NCEA support systems were the training days, networking with other schools, and the exemplar activities on the MoE and NZQA websites and the AGTA and NZBoGT CD Roms. The major obstacles reported as hindering the implementation process included the faulty exemplar materials, the erratic performance by external moderators, uncertainty in interpreting the achievement standards and the rushed nature of the implementation timeline.

Conclusions

The teacher perceptions, regarding the implementation of Level 1 NCEA geography, provide valuable insights into factors that can help or hinder assessment reform at the senior secondary school level. Given the challenges, increased in workload and effort the case study geography departments experienced in getting NCEA up and running, any perceived lessons learnt that could lead to more effective assessment change in the future are worthy of consideration.

Factors perceived by the interviewees as contributing positively to the implementation process included the facilitation workshops, networking with teachers from other schools, and the provision of time allowances for planning and professional development. They perceived the process of engaging in professional discussions with other teachers, including the sharing of ideas and resources in a collaborative fashion to be both helpful and reassuring. The availability of NCEA related exemplar resources, for use and guidance, as provided on the MoE and NZQA websites were considered to be valuable as were the complimentary roles performed by the national and regional geography associations and local social science subject advisor. The benefits of hands on experience over time was also observed to be an essential ingredient, especially in terms of growing teacher confidence and familiarity with the NCEA assessment procedures and processes.

Factors participants perceived as hindering NCEA implementation process highlighted poor implementation practices, that if addressed could make for more effective assessment change.

Changes included ensuring the availability of quality assured exemplar activities and assessment programmes, to help maintain teacher confidence and to keep workloads more manageable. The benefits of conducting a trial period should not be overlooked in this regard. It was also perceived as crucial to have changes in assessment policies and procedures, including the release of essential documents such as examiner reports, to be made available to schools in a time framework that allows teachers to adapt their practice appropriately.

The interviewees emphasised that in the early stages of assessment reform, when the learning curve for teachers is the steepest, external moderation must support teacher professional development through the provision of timely and appropriate feedback and feed forward. The temptation to incorporate syllabus/curriculum updates via assessment reforms should be avoided, as it adds not only to teacher workloads but makes implementation process more complex in nature. The professional development should recognise and target early on specific skill areas that teachers display a lack confidence in, such as making holistic judgements. It is important for the central agencies to recognise differences between departments when putting together training programmes in place. Specific support is often needed to address individual department needs, as 'one size does not necessarily fit all'. This is particularly the case for the smaller sized geography departments.

Acknowledgements

I would like to express my appreciation to the interviewees, who so willingly gave of their time to participate in the semi-structured interviews conducted during 2002 and 2003.

References

- ACT New Zealand (2002). *"Not Achieved" Inquiry into the National Certificate of Educational Achievement. Presented to the House of Representatives*, House of Representatives, Wellington.
- Alison J (2005). *Teachers talk about NCEA: Research report on focus groups with secondary teachers. Summary version*. PPTA, Wellington.
- Black P (2001). *Report to the Qualifications Development Group, Ministry of Education, New Zealand on the proposals for development of the National Certificate of Educational Achievement* [NCEA Policy Documents], Retrieved November 2, 2002 from <http://www.minedu.govt.nz>
- Creech W (1998). *Launch of Achievement 2001- School qualifications for 16 to 19 year-olds*. Speech notes given at Rangiora High School, November 5, 1998. Ministry of Education, Wellington.

- Education Review Office (2004). *Progress of NCEA levels 1 and 2, and readiness to implement level 3. Executive Summary*, 2004, Retrieved 11 March 2004 from <http://www.ero.govt.nz/Publications/pubs2004/NCEAFeb04.htm>
- Fastier, M (2001). The evolution of achievement standards based assessment in the New Zealand senior secondary school context. *The New Zealand Journal of Geography* 111, 16-23.
- Hipkins R, Conner, L & Neill, A (2005). *Shifting balances II The impact of level 1 and 2 NCEA implementation on the teaching of geography and home economics*, New Zealand Council for Educational Research, Wellington.
- New Zealand Board of Geography Teachers. (1999). *Position paper: Future directions of geography education and assessment for 2001 and beyond*, New Zealand Board of Geography Teachers, Hamilton.
- New Zealand Qualifications Authority (2002). NCEA Update, 11.
- Post Primary Teachers' Association (2002). *The NCEA result: not yet achieved: An executive summary*. Paper presented at the PPTA Annual Conference, 2002.